What Works In Regional Economic Development: 
Learning from International Best Practice

One NorthEast

FINAL REPORT

29 October 2006
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EXECUTIVE SUMMARY

To achieve even the UK national average on a number of productivity and economic participation indicators the North East England region will have to make a significant economic step change in the near future.

STUDY AIMS AND APPROACH

In March 2006, One North East commissioned a partnership of CURDS (Newcastle University) and GHK Consulting to identify and develop a series of international case studies of best practice in regional economic development.

The aim was to identify economic development interventions that have brought about required step change within formerly lagging regions across the world and to consider potential learning (themes and recommendations) as to ‘what works in regional economic development’.

The research approach entailed two distinct phases. Phase 1 entailed statistical benchmarking of regions across Europe, North America and Australia; the shortlisting, and subsequent development, of a selection of international Regional Case Studies; and the distillation of a set of good practice Common Themes through a Workshop process and International Peer Review. Phase Two undertook a day Workshop with regional stakeholders at which the Common Themes were applied directly to the economic context of North East England in order to develop Recommendations.

In total, eight regional case studies were developed of regions with better than average performance on one or more international indicators of economic performance, a regional economic context relevant to the historical experience of North East England, interventions of high relevance to the objectives of the draft 2006 Regional Economic Strategy and, ultimately, intervention programmes that it was expected North East England ‘could do’.

The Case Studies are listed in Table 1.
Table 1: The Regional Case Studies

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Economic Context</th>
<th>Type of Intervention</th>
<th>Lesson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cork, Ireland</td>
<td>City region of 250,000 which has almost matched the Celtic Tiger growth rates of</td>
<td>Growth of clusters of knowledge-based manufacturing and internationally traded services</td>
<td>Effective partnership working in a highly centralised state.</td>
</tr>
<tr>
<td></td>
<td>the Dublin capital city region. Now designated a Gateway City within the National</td>
<td>in line with national priorities and based upon high quality FDI. Now seeking to</td>
<td>Local expansion of well-researched national offer.</td>
</tr>
<tr>
<td></td>
<td>Spatial Strategy.</td>
<td>promote a regional image based upon culture.</td>
<td></td>
</tr>
<tr>
<td>Vastra Gotaland,</td>
<td>A city of 500,000 (Gothenburg) within a region of 1.5 million. An old industrial</td>
<td>Has applied the ‘triple-helix’ model of partnership between universities, public</td>
<td>City region governance pilot producing Regional Growth Agreements</td>
</tr>
<tr>
<td>Sweden</td>
<td>region (based upon shipbuilding), experiencing substantial growth in new</td>
<td>sector and business to deliver substantial growth in R&amp;D and new technology based</td>
<td>Growth model based upon regional innovation strategies.</td>
</tr>
<tr>
<td></td>
<td>knowledge-based industries.</td>
<td>firms.</td>
<td></td>
</tr>
</tbody>
</table>
| Navarre, Spain      | A low density region of 500,000 inhabitants that has experienced rapid           | Technological upgrade of whole economy through a regional innovation system approach | Technological upgrade across economy supported by universities and education.
|                     | industrialization (‘economic step-change’) in the last 30 years.                 | which recognises challenges of a small firm economic base.                           | Region has high degree of regional autonomy.                            |
| Norte, Portugal      | Centred on the Porto city-region, Norte is Portugal’s largest region (3.7        | Responding to the ‘productivity challenge’ by upgrading traditional manufacturing    | Policy discrimination towards technologically intensive activities aims for move up the international value chain.
|                     | million population) and the main export base of the national economy.            | sectors and industrial models through technology transfer programmes and targeted    | Cross-border collaborations as part of engagement with potential new regional futures. |
|                     | Experiencing the challenges of deindustrialisation of traditional economic base  | public sector R&D support. New opportunities through the promotion of an international |                                                                        |
|                     | – textiles, clothing, furniture – due to global competition.                      | collaborative Euro-region initiative with Galicia.                                   |                                                                        |
| Ontario, Canada     | Ontario has repositioned itself, and its 12.5 million inhabitants, from a        | Within a broader ‘learning region’ strategy - higher wage, higher value-added        | Role of small business growth strategies (including targeted support)   |
|                     | domestic provincial industrial heartland to a global-city region and North        | and environmentally sustainable jobs – Ontario has created a range of support        | within a regional development model.                                    |
|                     | American region-state. Following sustained economic restructuring, Ontario       | structures to target SME growth (including entrepreneurship and minority groups).    | Provincial status provided greater autonomy and access to funds.       |
|                     | remains a manufacturing heartland, including large concentrations of FDI.         |                                                                                       |                                                                        |
| Piedmont, Italy     | Old industrial region centred on Turin. Long term strategy to attain economic    | Through political consensus a 10 year strategic development plan was developed and   | Public leadership and multi-level consensus building through the process of visioning, scenario building and strategic planning. |
|                     | diversification away from being Fiat’s 'company town'. Region is beginning to    | implemented to create a new role for Turin as an international city. A series of     | Ambitious strategy of regional image transformation to create place in Europe’s new knowledge economy. |
|                     | achieve a mixed and increasingly service orientated economic base.               | large scale collaborative projects have been developed, including the 2006 Winter |                                                                        |
|                     |                                                                                   | Olympics, to transform Turin's image and to attract FDI and high-skilled in-migration |                                                                        |
|                     |                                                                                   | through place marketing.                                                             |                                                                        |
| **Styria, Austria** | Lander region of 1.2 million inhabitants experiencing economic revival as Austria’s industrial heartland following the intensive restructuring of its historical industrial base during the 1980s and early 1990s. | Innovation led growth model based on supporting existing sectoral strengths and clusters (e.g. automotive, mechanical engineering) to move up the value chain. Collaborative research, technological and vocational training infrastructures created as key repositories of internationally-renowned sector expertise for both domestic and international investment. | Old industrial region’s can achieve knowledge and skill intensive growth recovery through existing sectoral strengths. Styrian Development Agency (supported by Lander and Federal Govt) key actor in renewal, including successful alignment of business support to the needs of industry. |
| **Tampere, Finland** | Finland’s second largest city-region (300,000) has emerged from a deep-seated recession (1991-1994) to achieve economic ‘step change’ through the enforced modernisation and renewal of its traditional engineering base and the growth of new and rapidly expanding business sectors, such as KIBS. | Policies to promote regional competitive advantage through R&D led growth and advanced engineering. Utilised national Centre of Expertise Programme to align national, regional and sub-regional bodies and resources to support existing and emerging sectors (e.g. Biomedical; ICT). Each Centre is supported by a specialised quasi-autonomous body stimulating collaborative R&D, networking, marketing, education and training. | Long term evolution of educational and R&D investment facilitated by visionary leaders within the city region. Highlights key factors of a high-skilled workforce and regional research competences in attracting and nurturing new growth opportunities. University-business interaction through vocational training and applied research. |
IDENTIFIED COMMON THEMES IN INTERNATIONAL REGIONAL DEVELOPMENT

Theme 1: Modes of Development or Growth Models

A variety of lessons can be grouped under the general theme of the model of regional development realised across the case study regions.

- **Adaptation and renewal can be achieved**: in the face of globalisation and relentless competition, a range of regions have been able to respond to the legacy of de-industrialisation and achieve new periods of economic growth. Navarre, in Spain, has seemingly successfully industrialised in the face of inter-regional competition at a global scale.

- **Considered and realistic appraisal of the regional asset base**: the case studies provide evidence of sustained research and strategic appraisal of the ‘existing state of the economy’; for example, assets to adapt (manufacturing base), assets to evolve (emergent sectors, higher education institutions), assets defined in relation to regional position within the national or European polity (Cork within the Celtic Tiger; Euro-Regions); and unrealised assets (for example, under-represented groups within new firm formation)

- **Diversity of new pathways**: development pathways have involved both adaptation (Styria) and the targeted shift to new sectors (Tampere); and in many instances a balance of the two (Norte, Ontario).

- **‘Balanced, rounded or inclusive growth’**: virtually all the cases implicitly focus on a ‘narrow’ economic agenda; Norte stands out in its broader statement of economic, social and sustainable development (as does possibly Ontario). Relatedly, most cases target high skilled and value added employment (in contrast, for example, to raising participation rates).

- **Sectoral adaptation**: within a common trend of the shift to service-orientated economies, virtually all the cases highlight the continued prospects for manufacturing growth – in other words, manufacturing can still matter. Generally, for it to do so, requires a drive towards higher value added activities.

- **‘Geo-political’ adaptation**: In virtually all cases, an underlying theme of economic adaptation (reflected in, for example, changing export markets, sources of FDI or labour force) is evident with the creation of new positions as gateways or corridors, or of centrality or peripherality, within supra-national political configurations such as (the expanding) EU or NAFTA.

- **The geography of growth**: Turin/Piedmont stands out as a case study in which the city was the focus for regional development (and Norte/Oporto to a lesser extent). Other examples do not, as currently configured, suggest intervention at the city (or city region?) level as the driving force of regional change.

- **The institutional framework for development**:
  - the variety of governance frameworks within which regions sit (centralised, federal, fragmented, Euro-region, etc.) has not prohibited regional dynamism and institutional innovation; ‘its co-ordination not institutions?’
  - nevertheless, the case studies point to greater promotion of innovation and dynamism within contexts of devolved power (Navarre, Styria)

- **The role of EU Structural Funds**: across a number of cases, the additionality of resources provided by Structural Funds has acted as a driver of development.
Theme 2: Modes of Intervention

The case studies exhibit a range of lessons concerning the development and implementation of interventions.

- **Leadership**: the public sector has played a key role in, and/or delivered, regional leadership across the case studies.

- **Strategic, long term (and collective) vision**: a sustained and evolving vision based upon an agreed and sophisticated analysis of ‘the regional problem’ drawing from comprehensive, coherent and consistent research activity and evidence (for example, Cork or Tampere).

- **‘Tailored policy’**: with an agreed strategy and vision in place, the potential exists to tailor regional and local policy whether through regionally-driven activity, ‘bending’ supra-regional activity to meet regional priorities or ‘regionalising the national’ (placing regional priorities within aspatial national policy).

- **Intervention programmes**: the following programmes can be identified:
  - Business development (sectoral/district/cluster/SME), and more broadly including clear evidence of the major role of high quality FDI
  - Regional science and technology policy (including policies directed towards innovation, a key role for higher education and that public sector R&D is a key driver)
  - Aspects of skills-led economic development (at differing skill levels and, again, focused on higher and further education)
  - Regional image and the business of culture: growing in significance and popularity, including the expansion of activity around telling or marketing ‘the regional story’
  - The culture of business: for example, high entrepreneurship rates or HEI and business interaction

- **Programme synergy and interdependence**: the combination, co-ordination and integration of complementary programmes is evident but difficult to clarify and evaluate at this level of analysis; for example, in the cases of Turin and Cork the role of image/culture in attracting knowledge workers is posited.

- **Institutional support**: the case studies exhibit the development of a range of institutions in the delivery of interventions; the evidence is not ‘one institution fits all’ but the alignment of appropriate institutions (in terms of leadership, resources, autonomy, stakeholder engagement, capacity, etc.).

- **Comparison with ONE draft Regional Economic Strategy**: the draft Strategy is structured around a statement on Vision and Collective Leadership that provides the context for Action within three domains: Business, Skills and Place. Comparison with the Case Studies highlights similar programme coverage bar certain interventions (physical infrastructure, connectivity) found under ‘Place’ which play a secondary and supporting role to interventions across the case studies.
RECOMMENDATIONS

Recommendation 1: Develop the regional capacity to deliver sustained, strategic and independent appraisal of the economic development challenges facing the North East England.

The production of sound development strategies based on a thorough assessment of the region’s economic profile and potential is a foundation for addressing the regions’ economic development challenge. Sustained analysis and understanding of the nature of the regional problem of North East England is a critical first step prior to:

- Adoption of a realistic economic development model and vision
- Realistic appraisal and assessment of the regional asset base and socio-economic structure
- Assessment of regional competitiveness and potential

One NorthEast is the strategic economic development body of the region tasked with providing leadership in economic policy making within the region and acting as the catalyst for appropriate intervention. A central element in this task is being clear about the model of economic development which the region is seeking to adopt and the values that underpin this. As such, the Agency needs to be placed at the centre of a sustained programme of research that provides it with the analytical and evidence gathering capacity to provide strategic leadership over time. Several case studies including Cork, Styria and Tampere provide evidence for the important role that such strategic capacity can play in the pursuit of successful economic development.

As the centre of any regional capacity, ONE should seek to build a balance between internal competence and external expertise including independent and ‘critical friend’ input and external validation. This capacity should incorporate an international dimension allowing for the appropriate identification of lessons and good practice from international comparison.

The region has in place a number of elements of such capacity including, for example, FutureMatters, IPPR North, NERIP, inter-RDA and city/LA learning networks, access to international consultancies and, importantly, international expertise within the region’s universities. The key task is to develop a more coordinated framework which can ensure the maximum value can be derived from this capacity. ONE should develop a framework to utilise these assets to provide both a learning agenda and strategic capacity for the organisation. In addition, it should seek to extend this framework to encompass its regional partners.

In time constructive, sustained and informed dialogue can be expected to contribute to a broader policy learning agenda within the region, the development of Strategic Added Value across the region’s strategy making institutions¹ and collective regional understanding of the nature of the economic development challenge and potential solutions.

¹ Such a capacity could be argued to be the first element of the ‘strategic maturity model’ called for in the evaluation of the previous RES (ONE, 2005, Evaluation of Realising Our Potential)
Recommendation 2: Continue to develop the evidence base to support the case for increased regional autonomy and discretion in policy making within the context of national policy frameworks

The case studies provide evidence for a plurality of economic development pathways. It remains unclear as to what extent ONE has scanned the potential economic pathways\(^2\) open to the region including, for example, the balance of adaptation versus a break from the past, the balance of economic, social and environmental goals, the geo-economic position of the region within the new global order and interventions geared towards drivers of change. Each of these approaches has implications for the geography of development in the region and regional actors need to be clear about the degree to which sectoral or geographical focus is most important for future development.

Put plainly, what is the economic role that we expect of North East England within the world, Europe and the UK? Should it’s strategy be driven by closing the productivity gap within the UK, especially when evidence suggests many key drivers of change are influenced more by national, than regional, factors and there is little evidence to suggest that doing the same as the other UK regions will ‘close the gap’.

Accepting the constraints of a national policy framework, what are the options for tailoring policy to meet the regional needs of North East England and its goal of ‘a high quality of life…and dynamic economy’ (Draft RES Vision)\(^3\)? What are the alternative potential shared economic models\(^4\) identified as missing in the evaluation of the previous RES. Do these models imply an economic development policy based on distinctive ‘quality-based’ assets (such as high level of skills, technology, etc) or more generic assets (such as low taxation and labour costs)? To what extent is the strategy based on promoting, for example, ‘smart growth’, emphasising the importance of FDI, cluster development, a search for global region scale, emphasising sustainable development strategies, etc.? Fashionable elements of these models are identifiable in the RES but how do these synthesise to create a distinctive and realistic model of development for North East England.\(^5\) The case studies demonstrate a range of possible strategies ranging from a continued emphasis on (high quality) FDI (Cork) through to an emphasis on the promotion of SMEs (Ontario) to renewal of existing industries (Styria). In all cases though, successful regions appear to judiciously combine and mobilise indigenous and exogenous assets.

Recommendation 3: Regional economic strategies are about prioritisation

Comparison of the draft RES against the case study evidence suggests that most intervention activity identified at an international level is to be found within the pages of the draft RES. The question remains as to whether this represents a strength or a

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\(^2\) We use the term pathways as a broader concept than that of the different ‘rates of growth’ scenarios developed for ONE as part of the production of the RES (ONE, 2003, Positive Scenarios for the North East Economy. Available at \url{http://www.onenortheast.co.uk/page/resevidence.cfm} )

\(^3\) ONE, 2006, Leading the Way: Regional Economic Strategy Consultation Draft, Vision, p.6

\(^4\) ONE, 2005, Evaluation of Realising Our Potential, p.48

\(^5\) Creating the capacity of the regional policymaking body to ask such questions of itself and undertake strategic choice is, of course, the focus of Recommendation 1
weakness. Case study evidence would suggest do less but with greater understanding of why. The case studies provide strong examples of regions that have prioritised particular strategies over a long period. In the Cork case the strategic priority to upgrade and embed FDI in key sectors has meant that the region has remained a focus for high quality, knowledge-based FDI in its key sectors. In Gothenburg the emphasis has been on science-led developments. In Ontario the province has made a radical decision to prioritise resources on high growth SMEs. In each case the evidence-base and economic intelligence that has underpinned these decisions has been impressive.

Strategy should be about analysis (see Recommendation 1) and explicit and informed choice (see Recommendation 2). The choice of development pathway and economic model should provide the framework for regional priorities – what goals are being sought, through what intervention mechanisms, applied to which regional assets. These priorities, in turn, should provide the framework and criteria for programme and policy choice, monitoring and evaluation frameworks, and output and outcome targets.

Prioritisation is not without risk but the balance of risks across a set of interventions can be assessed.

The case study evidence provides some guidance in the process of prioritisation:

- Evolution, not revolution: incremental and balanced, not over-ambitious, goals
- Target drivers of growth rather than begin with a concern for intra-regional geography
- Target value-added activities (whether manufacturing or services)
- Balance, align and positively integrate indigenous and exogenous sources of growth
- Infrastructure investment and place development as a means to an end; implemented as part of programme activity justified on the basis of drivers of growth

**Recommendation 4: Evolve your regional assets**

In virtually all the cases, development pathways have been based upon selective evolution of assets (infrastructure, critical mass, knowledge, skills, market penetration, etc.) derived from the regional legacy of previous rounds of economic development. There has undoubtedly been a tendency in the North East in the past to disregard the potential of ‘old industries’, particularly manufacturing. The manufacturing sector remains ‘over-represented’ in the regional economy partly through foreign-direct investment that has contributed to a broadening of the manufacturing base including in areas such as automotive, offshore, pharmaceuticals and biotechnology. All offer strength in technology and skills and exemplify the asset base of enterprise, innovation and employment evident within existing industry. The task of strategy is to build on existing assets wherever possible - identifying innovative possibilities as well as developing entirely new activities - and attracting and embedding exogenous resources, ideally in ways that generate positive externalities from which existing firms can benefit.
Recommendation 5: The Study reaffirms the policy drive within the draft RES for a unified regional governance system offering leadership and vision

International experience highlights the significant role that regional leadership can play within economic performance. No one governance model dominates but in most cases an institutional infrastructure that aligns horizontal and vertical tiers of government to collaborate (and invest) around shared goals has contributed to effective strategy, efficient implementation and enhanced regional performance. In many cases, the development of regional capacity has run in parallel with the development of enhanced collaborative governance. In each case study, key institutions have taken on a wider leadership role in animating strategies, through the development of evidence and promoting consensus (such as IDA Ireland in Cork and SFG – the Styrian Development Agency – in Austria).

Within the UK environment, Regional Development Agencies (through the strategic mechanism of the RES) are well placed to fulfil the role of leadership and vision.

Recommendation 6: That One NorthEast uses the Common Themes and Case Studies of What Works in Regional Economic Development to inform future policy action

This report provides the most recent addition to the evidence base on, and for, regional development available to One NorthEast. At this point in time (and stage in the policy cycle) it is recommended that the Study act to inform at least two activities. First, the Study is utilised both within the Agency and across its regional partners as part of the policy learning agenda and development of strategic capacity (see Recommendation 1). Second, the Study is used to inform the development of future actions, including progression of the RES Action Plan.
What Works in International Regional Development

1 INTRODUCTION

The North East England region has to make a significant step change to achieve the UK national average on a number of productivity and economic participation indicators. To improve the region’s performance on such indicators and, ultimately, to deliver on the UK Government’s target to reduce regional disparities, One NorthEast is keen to learn from what has worked elsewhere.

In March 2006, a partnership of CURDS (Newcastle University) and GHK Consulting was commissioned to undertake a series of international case studies of regional development to deliver learning on ‘what works’.

1.1 Project Aims

The aim of the project was to identify the types of economic development interventions that have brought about required step change within formerly lagging regions across the world, and consider how these regions have sustained, and built on, progress.

The project aimed to:

- Identify successful regions, historically similar to the North East, that have turned around their economic performance to achieve a step change.
- Identify the types of economic development interventions that have brought about required step change.
- Investigate the extent to which these interventions provided the catalyst, or whether the outcomes would have been happened anyway.
- In identifying interventions, explore how regions have best utilised existing resources, including how they have capitalised on and exploited their regional distinctiveness for economic gain.
- Explore how these regions have sustained and built on economic growth.
- Explore how successful regions have collaborated on an international basis, for mutual benefit.
- Identify whether international collaborations have made a significant contribution to successful performance.

1.2 Structure of the Report

The Report is structured as follows:

- Section 2 outlines the Study approach and methodology
- Section 3 provides the results of the regional benchmarking exercise
- Section 4 includes the Regional Case Studies and the Common Themes drawn from their analysis
- Section 5 sets out the Study Recommendations
- Annexes provide a variety of supporting material and evidence, including the full Case Studies
2 RESEARCH APPROACH AND METHOD

The following section briefly outlines the research approach undertaken within the Study.

2.1 Research Approach

The aims of the project (see Section 1.1) provided the framework for the research approach which comprised a number of tasks split into two phases (see Figure 1).

Figure 1: Study Method

2.1.1 Phase 1: Learning from International Best Practice: Regional Case Studies

Phase 1 comprised the selection and development of 8 Regional Case Studies as the basis for the development of a common set of themes and lessons in international best practice. Individual tasks undertaken within this Phase were:
Inception Meeting and Report
Quantitative Statistical Benchmarking of Regions

A statistical benchmarking exercise to identify international regions which have improved markedly from a position of being among the less successful regions on key economic performance indicators. Particular attention was paid to a long list of 12 potential case studies that had been agreed at Inception.

‘Regional Fit’ of Case Studies: regional histories and policy interventions

A half-day Workshop that reviewed a list of 12 candidate case studies of international regional development - chosen on the basis of statistical benchmarking, regional fit and nature of intervention – and selected 8 cases for further development.

Development of Regional Case Studies

Desk-based research and use of international experts and contacts to develop the chosen case studies to a common template.

Regional Case Studies: Common Themes

A half-day Workshop to review the Regional Case Studies and develop Common Themes.

The Common Themes were further refined through peer review and comment by three international regional development academic experts.

Interim Report ‘Learning from International Best Practice in Economic Development through Regional Case Studies: Common Themes’.

2.1.2 Phase 2: What Works in Regional Development: Applying Lessons to the North East England

Phase 2 used the experiences, lessons and themes of the Regional Case Studies and applied them to North East England to develop actionable Recommendations for ONE and its partners in the region. Tasks within this Phase were:

Applying the Lessons Workshop

A Workshop held with regional stakeholders and a broad range of One NorthEast representatives, and including guest speakers on regional development, to review a North East England Regional Case Study in light of the Case Studies and Common Themes reported upon in the Interim Report.

The aim of the Workshop was to aid development of a set of Recommendations for strategic action and policy activity, including potential international collaboration.

Participants received a Briefing Document comprising the Interim Report and an extended Regional Case Study of the North East of England; the latter setting out the economic profile, institutional framework and current intervention initiatives for the region, and ending with the vision for the region encapsulated in the revised Regional Economic Strategy.
Final Report ‘What Works in Regional Economic Development: Learning from International Best Practice’

A Final Report was developed (this document) comprising the material created during the Study and ending with a set of agreed Recommendations
3 BENCHMARKING OF INTERNATIONAL REGIONS

This section of the report presents the results of statistical benchmarking analyses aimed at identifying regions which have improved markedly in recent years on key economic performance indicators. The primary objective was to measure relative performance across an appropriate time-frame (an aim was 10 years) as far as the available datasets permitted.

The principal indicators sought were GDP and levels of productivity, along with measures related to innovation and the educational attainment and economic participation of the working age population. A lack of comparable data precluded the use of an indicator on regional levels of entrepreneurship. Particular attention was paid to a long list of 12 case studies that had been identified at Inception.

3.1 The Choice of Comparator Regions: Scale and Boundaries

Statistical benchmarking is most readily achieved for regions in the European Union (EU) because considerable efforts have been made over many years by Eurostat to ensure data comparability. Where the data permits, the analyses have been extended to include coverage of regional performance in the USA as well as Australia and Canada. Annex 1 provides a summary of the data sources including issues of access, comprehensiveness and reliability.

The issue of scale across comparator regions is core to any regional benchmarking analysis. If the region definition used for the analysis is too large then distinctive features of the real region-of-interest may become too ‘diluted’ to be observable; if too small a region is used then the statistics may well be distorted by capturing only a part of the processes operating within the region. For example, one of the case studies chosen is Cork – identifiable first and foremost by reference to its central city but sitting within its own Cork County. Cork, however, also sits within various larger region definitions including the historic Munster province (of which Cork is the largest city)\(^6\).

The only practicable solution is to adopt officially-defined region definitions. In the EU there is the “NUTS” hierarchy of sets of regions which were explicitly identified to be the ‘least worst’ solution to the problem of finding comparable statistical areas within the administrative boundaries in all the member countries.

North East England is a NUTS level 1 region and so the statistical bench-marking analyses use all the regions at this level of the NUTS hierarchy, plus States and Provinces which are the largest sub-national scale areas in the three non-EU countries analysed\(^7\). The main disadvantage of this pragmatic approach is that many regions in most other countries are rather large because the ‘standard’ regions in the UK have a

\(^6\) Clearly this dilemma could lead to the huge task of identifying the most appropriate set of regional boundaries for the analysis, and such a task is far beyond the scope of this study because the benchmarking analyses call for regional definitions not only of the potential case study regions but also of all other parts of the EU and the other countries to be included in the analyses.

\(^7\) Small and ‘outlier’ regions such as Madeira have been excluded from the analysis.
smaller average size than the NUTS level 1 regions in most other countries. This can be illustrated by the example of Cork and the other case study regions: Table 1 presents the relevant information.

Table 1: Boundary definition of the case study and other candidate regions

<table>
<thead>
<tr>
<th>Long list of case study regions</th>
<th>NUTS level at which it is most closely represented</th>
<th>NUTS level 1 region (or Province) covering the region</th>
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</tr>
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<td>Sachsen</td>
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<tr>
<td>Turin &amp; Piedmonte, Italy</td>
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<td>Nord-Ovest</td>
</tr>
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<td>Manner-Suomi</td>
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<td>Süderosterreich</td>
</tr>
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<tr>
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<tr>
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<td>non-EU</td>
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</tr>
<tr>
<td>Queensland, Australia</td>
<td>non-EU</td>
<td>n/a</td>
</tr>
</tbody>
</table>

3.1.1 Setting the Scene: Employment Rates

The analyses here are of the pattern of recent change so as to focus on the dynamics in the North East England and comparator regions.

To set out the form of analysis used, but also partly to establish the extent of differences between regions, the first analysis is of the latest data on employment rates. This specific static measure was chosen because it has the least problems of comparability across the different countries’ datasets.

Table 2 presents the 25 regions (the top sixth of all regions; some 170 odd across Europe, North America and Australia) with the highest 2004 Employment Rates and the rankings of the North East and those of comparator regions (shown in bold) which fall outside the highest ranked 25.

Table 2 presents the 25 regions (the top sixth of all regions; some 170 odd across Europe, North America and Australia) with the highest 2004 Employment Rates and the rankings of the North East and those of comparator regions (shown in bold) which fall outside the highest ranked 25.

On this measure, only Sweden and Ontario of the comparator regions are in the top 25 - the high ranking regions are largely in North America. There are two of the comparator regions ranked below the North East and these are noticeably different, with the Noreste (Navarre) little industrialised and Nord-Ovest (Piedmonte) the highly industrialised Turin region.
Table 2: Ranking of International Regions by Employment Rate 2004

<table>
<thead>
<tr>
<th>Rank</th>
<th>Region</th>
<th>Rank</th>
<th>Region</th>
</tr>
</thead>
<tbody>
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<td>Australian Capital Territory</td>
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<td>Continente</td>
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<td>Nebraska</td>
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<td>North East</td>
</tr>
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<td>6</td>
<td>North Dakota</td>
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</tr>
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<td>7</td>
<td>Manitoba</td>
<td>108</td>
<td>Nord-Ouest</td>
</tr>
<tr>
<td>8</td>
<td>Sverige</td>
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<tr>
<td>9</td>
<td>Saskatchewan</td>
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<td>10</td>
<td>Ontario</td>
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<td>Delaware</td>
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<td>12</td>
<td>Nevada</td>
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<td>Alaska</td>
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<td>Wisconsin</td>
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<td>15</td>
<td>Utah</td>
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<td>16</td>
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<td>17</td>
<td>Wyoming</td>
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<td>West-Nederland</td>
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<td>South East</td>
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<tr>
<td>22</td>
<td>East Of England</td>
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<td>Virginia</td>
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<tr>
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<td>Kansas</td>
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<tr>
<td>25</td>
<td>Zuid-Nederland</td>
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</tr>
</tbody>
</table>

Figure 2 provides an important part of the context which is needed to explain the rankings of regions. It shows values for those countries with at least four regions, giving the value of the highest and lowest region and also the country overall.

Countries tend to have quite small differences between their highest and lowest ranked regions, indicating that this is a measure which varies more between countries than within them. To put it another way, the factors determining a region’s value are more strongly determined by national factors such as the macro economy and tax regimes than they are by regional differential performance.

To some extent, the scope for regional difference is greater for counties with more regions, hence the widest variation is among the USA’s 50 states, followed by

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8 This is a much more important issue for an analysis at one point in time than it is for analyses of change over time, where differences between countries become ‘fixed effects’ which do not affect the change data so much.
Germany and the UK\(^9\). From this perspective, the position of the North East here nearly two-thirds of the way down the rankings of all the regions analysed is best understood as that of lagging region in a country with a high overall value.

The fact that Italian comparator region Nord-Ovest is ranked not far below the North East can be seen to partly justify the choice of that region because its apparently low employment rate is in fact very high in the context of its own country and, as noted, the national dimension tends to be predominant in determining regional values on this particular indicator.

![Figure 2: Employment Rate 2004](image)

3.1.2 Employment Rate Change

Employment rate change can be compiled for the five year period 1999-2004 for all the countries of interest. Table 3 shows that although the North East is a lagging region within the UK (Figure 2), it experienced a strong recent growth in employment rates to reach its current level. The comparator region performing more strongly still was Spain’s Noreste: this is included here because of the interest in Navarre but it also covers the Basque Country where there are similarities to the North East in industrial legacy and related problems. Figure 3 shows that Spain in general has performed very well in terms of employment rate growth.

The ranking of regions provides a reminder that change measures tend to highlight regions where the value was low at the outset and so there was considerable scope for improvement. The corollary of this point is that regions which had high levels at the start of the period – such as Sweden – are not likely to feature strongly in terms of fast growth. Despite this, none of the comparator regions fall into the lower reaches of the rankings on this key measure of recent regional dynamics.

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\(^9\) The UK has notably more Level 1 regions than France and Italy which are similarly-sized.
Table 3: Ranking of International Regions by Employment Rate Change 1999-2004

<table>
<thead>
<tr>
<th>Rank</th>
<th>Region</th>
<th>Rank</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Comunidad De Madrid</td>
<td>26</td>
<td>Nord-Ovest</td>
</tr>
<tr>
<td>2</td>
<td>Sur</td>
<td>42</td>
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<td>Noreste</td>
<td>46</td>
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</tr>
<tr>
<td>4</td>
<td>Nord - Pas-De-Calais</td>
<td>65</td>
<td>Südösterreich</td>
</tr>
<tr>
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<td>Este</td>
<td>67</td>
<td>Continente</td>
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<tr>
<td>6</td>
<td>Attiki</td>
<td>72</td>
<td>Manner-Suomi</td>
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<tr>
<td>7</td>
<td>Noroeste</td>
<td></td>
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<tr>
<td>8</td>
<td>Centro (E)</td>
<td></td>
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<tr>
<td>9</td>
<td>Prince Edward Island</td>
<td></td>
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<tr>
<td>10</td>
<td>Centro (I)</td>
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<tr>
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<tr>
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<td>Sud-Ouest</td>
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<td>Quebec</td>
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<td></td>
</tr>
<tr>
<td>17</td>
<td>Newfoundland &amp; Labrador</td>
<td></td>
<td></td>
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<tr>
<td>18</td>
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<td></td>
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<tr>
<td>25</td>
<td>Bassin Parisien</td>
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</tr>
</tbody>
</table>
One factor to bear in mind when interpreting the change in regional employment rates is that this reflect changes not only in the numbers employed but also in the numbers of people who might work. What this means is that regions where the working age population is growing rapidly can readily experience declining employment rates even though they have seen employment growth. By the same token, the success of the North East on this measure is partly because of the steady out-migration flow which has meant that modest employment growth translates as high employment rate growth. The same process has applied to several other regions showing similar values (see Table 3).

### 3.1.3 Regional GDP

Table 4 ranks regions by change in regional GDP (and after controlling for inflation)\(^\text{10}\). The one comparator region which performs well on both this and the previous indicator is Ireland where growth has not been limited to the Cork area but is much more widespread.

Figure 4 shows that USA and Canada are not like the European countries in having regions with closely aligned GDP growth rates; the similarity of regional values within most counties means that comparator regions examined here tend to have values which are mostly determined by the relative trend at the national scale, rather than they are by distinctly regional factors.

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\(^{10}\) The available datasets cover 1998-2003 for EU regions and 1999-2004 elsewhere; see Annex 1
<table>
<thead>
<tr>
<th>Rank</th>
<th>Region</th>
<th>Rank</th>
<th>Region</th>
</tr>
</thead>
<tbody>
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<td>Saskatchewan</td>
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</tr>
<tr>
<td>8</td>
<td>Nisia Aigaiou, Kriti</td>
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<td></td>
</tr>
<tr>
<td>25</td>
<td>Maryland</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The available datasets cover 1998-2003 for EU regions and 1999-2004 elsewhere; see Annex 1
3.1.4 Regional Productivity

The final indicator for which there are sufficiently comparable datasets for EU regions and the North American and Australian states and provinces is a productivity estimate derived from the GDP and employment statistics (see Table 5). Given its high ranking on both the GDP and employment rate measures separately, it is no surprise to find Ireland ranked highly on this measure too.

What emerges from this analysis is that all the other comparator regions which did well on one of those separate indicators did less well on the other, with the effect that they all end up in the middle part of this ranking.

Figure 5 shows that some countries have very much wider regional differentials in the growth of productivity than others; the UK has one of the wider gaps between its best performing region and its worst (the North East). However, because the country as a whole has quite a strong relative performance, this region does not fare too badly in international terms despite being lagging in comparison to its neighbours.
### Table 5: Productivity change 1998/9-2003/4

<table>
<thead>
<tr>
<th>Rank</th>
<th>Region</th>
<th>Rank</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Saskatchewan</td>
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<tr>
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</tr>
<tr>
<td>25</td>
<td>Minnesota</td>
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</tr>
</tbody>
</table>
3.1.5 **Highly Qualified Employment Change**

The remaining three indicators of regional dynamics cannot be compiled comparably for the three non-EU countries whose datasets were included in the four analyses presented prior to this point. The consequence is that Ontario is no longer one of the comparator regions and, because the number of regions analysed is almost halved, well-performing regions have to have rankings in or around the top dozen rather than in the top 25 as above.

The first measure looks at the upper end of the labour market by examining the proportion of people in work who have high level qualifications such as degrees. This proves to be an indicator on which more than half of the seven comparator regions within the EU have high values, including the Tampere region (Manner-Suomi) as well as three which had been highly ranked on one or more indicator discussed above (see Table 6).

It is important to remember that these results can be produced by a variety of factors: for example, the Turin region (Nord-Ovest) may well have seen a growth of jobs filled by well-qualified people but its strong performance on this indicator could also partly reflect the decline of older industries which take less well qualified people out of the labour market equation altogether. Figure 6 suggests that Italy is something of an exception in any case – perhaps partly due to some data inconsistency – but the general point about a ‘shake-out’ of lower skilled jobs remains important to keep in mind.

Setting aside Italy at one extreme and Germany and perhaps France at the other, Figure 6 reveals that this is the first of the indicators examined here for which variation within countries seems to be greater than that between countries. The implication is that performance on this measure will predominantly reflect regional rather than national factors.
Table 6: Highly qualified employment change 1999-2004

<table>
<thead>
<tr>
<th>Rank</th>
<th>Region</th>
<th>Rank</th>
<th>Region</th>
</tr>
</thead>
<tbody>
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<td>Centro (I)</td>
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<td>Sverige</td>
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<td>Bruxelles / Brussels</td>
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<td>13</td>
<td>Noroeste</td>
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</tbody>
</table>

3.1.6 Knowledge Intensive Employment

Although an employed labour force may be well-qualified they may not necessarily be working in jobs requiring that level of qualification; the jobs may also be in low technology sectors or in some other way be unrelated to an underlying regional growth dynamic.

Table 7 focuses on jobs in activities where the exploitation of knowledge is central; these are the activities which are widely seen to be most likely to drive a region’s future...
economic growth. The change measure being used again highlights the growth of previously-lagging regions but, even allowing for this ‘catching up’ effect, the performance of the Noreste region which includes Navarre is impressive.

The modest performance of Sweden (Sverige) may largely reflect the opposite effect – that it is difficult to grow rapidly from a high initial value – but the same explanation cannot account for the North East’s very low ranking. (Figure 7 shows it as the lowest of all regions, but this is because the graphs exclude regions in countries with fewer than three NUTS level 1 regions.) Figure 7 shows that this indicator is another which tends to vary more regionally than between countries, with the most dramatic variation to be found within the UK.

Table 7: Knowledge-intensive employment change 1999-2004

<table>
<thead>
<tr>
<th>Rank</th>
<th>Region</th>
<th>Rank</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>East Of England</td>
<td>18</td>
<td>Ireland</td>
</tr>
<tr>
<td>2</td>
<td>Saarland</td>
<td>19</td>
<td>Manner-Suomi</td>
</tr>
<tr>
<td>3</td>
<td>Bremen</td>
<td>21</td>
<td>Südösterreich</td>
</tr>
<tr>
<td>4</td>
<td>Bruxelles / Brussels</td>
<td>30</td>
<td>Nord-Ovest</td>
</tr>
<tr>
<td>5</td>
<td>Baden-Württemberg</td>
<td>31</td>
<td>Sverige</td>
</tr>
<tr>
<td>6</td>
<td>Nord-Est</td>
<td>51</td>
<td>Continente</td>
</tr>
<tr>
<td>7</td>
<td>Centro (I)</td>
<td>77</td>
<td>North East</td>
</tr>
<tr>
<td>8</td>
<td>Sachsen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Northern Ireland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Bayern</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>London</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Noreste</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Hessen</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.1.7 Patent Registration

The final indicator presented seeks to identify an indigenous process shifting a region toward growth based on innovation and knowledge: the indicator is the change in the number of patents registered in each region (Table 8).

The results again suggest the caveat about a probable 'catching up' effect in regions where the initial values were low because the comparator regions performing best are two of those where patenting activity was at a modest level until recently. As with the previous measure (Table 7), the Styrian comparator region (Südösterreich) does not quite make it into the list of highest ranked regions but it maintains its rather strong performance across several different indicators.

Table 7: Patent registration change 1995-2003

<table>
<thead>
<tr>
<th>Rank</th>
<th>Region</th>
<th>Rank</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kentriki Ellada</td>
<td>22</td>
<td>Südösterreich</td>
</tr>
<tr>
<td>2</td>
<td>Continente</td>
<td>27</td>
<td>Ireland</td>
</tr>
<tr>
<td>3</td>
<td>Attiki</td>
<td>35</td>
<td>Nord-Ovest</td>
</tr>
<tr>
<td>4</td>
<td>Sur</td>
<td>48</td>
<td>Manner-Suomi</td>
</tr>
<tr>
<td>5</td>
<td>Centro (E)</td>
<td>56</td>
<td>North East</td>
</tr>
<tr>
<td>6</td>
<td>Thüringen</td>
<td>72</td>
<td>Sverige</td>
</tr>
<tr>
<td>7</td>
<td>Luxembourg (G-D)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Brandenburg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Mecklenburg-Vorpommern</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Sachsen-Anhalt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Noreste</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Zuid-Nederland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Sud</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 8 shows that here again the variation at the regional scale is greater than that between countries, with most countries’ overall value lying within the inter-regional range of almost all other countries. The one clear exception is the UK where a sudden decline in recorded patenting activity late in the period analysed here suggests a change in data collection practices rather than a stark decline in ‘real world’ innovation behaviour.

3.2 Benchmarking Summary

To some extent, the analyses reported here are not easily summarised. Conclusions that can be drawn are:

- apart from its growing employment rate, the North East England dynamics measured here indicate relative weakness rather than strength
- the comparator regions (bar one) are among the best performing sixth of all the regions here on one or more indicator
- the exception to the above generalisation is the Styria region which does not perform exceptionally on any one indicator but is fairly strong on several
- some of these dynamic indicators highlight – perhaps exaggerate – any growth from a position of relative weakness
- some indicators’ patterns across countries reveal that the relative national strength on that factor is the crucial determinant of regional performance; regional policy-makers may find particularly interesting those indicators which show greater inter-regional variation than contrast between countries (for example, highly qualified employment and knowledge intensive employment).
4 REGIONAL CASE STUDIES IN INTERNATIONAL REGIONAL DEVELOPMENT

This section outlines the choice of Regional Case Studies and provides a short overview of each Case Study. The case studies are provided in full in Annex 2.

4.1 Selecting the Regional Case Studies

As outlined in Section 2, a Workshop was held attended by the Study Team and ONE representatives and whose aim was to select 8 international regional case studies for further development and analysis. The process of selection involved:

- Presentation of a long list of 12 case studies of international regional development
- Discussion of ‘regional fit’ and choice

The following list of 12 candidate case studies was presented:-

- Cork, Ireland
- Gothenburg, Sweden
- Lille, France
- Navarre, Spain
- Norte, Portugal
- North Carolina, USA
- Ontario, Canada
- Piedmont, Italy
- Queensland, Australia
- Saxony, Germany
- Styria, Austria
- Tampere, Finland

4.1.1 Selection Criteria

Selection of 8 case studies for further development and analysis was based upon the following criteria:

- Regional economic context vis-à-vis the North East England: similar history, evidence of recent growth?\(^{12}\)
- Type of intervention: individual/combination

\(^{12}\) A Case Study of North East England is provided in Annex 3.
• Intervention of high relevance vis-à-vis Regional Economic Strategy 2006 objectives\textsuperscript{13}
• Any known sub-regional growth dynamics of comparability to the North East (for example, city region and/or urban and rural dimensions)
• Could the North East do it?

4.2 The Case Studies

A total of 8 Case Studies were selected and each is summarised below. Table 8 provides a summary of the key dimensions that formed the case for selection.

\textsuperscript{13} The Draft 2006 Strategy is available at http://www.onenortheast.co.uk/page/res/sustainability.cfm
Table 8: Selection of Regional Case Studies

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Economic Context</th>
<th>Type of Intervention</th>
<th>Relevance to RES 2006</th>
<th>Sub-regional growth dynamics</th>
<th>Could the North East do it?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cork</td>
<td>Similar to North East England</td>
<td>FDI, knowledge sectors</td>
<td>Knowledge sectors</td>
<td>City region dynamic?</td>
<td>Facilitated by national government</td>
</tr>
<tr>
<td>Vastra Gotaland</td>
<td>Similar to North East England</td>
<td>Knowledge-based clusters, higher education, entrepreneurship</td>
<td>Knowledge-based clusters, higher education, entrepreneurship</td>
<td>City region governance pilot</td>
<td>Regional Growth Agreements (similar to RES)</td>
</tr>
<tr>
<td>Navarre</td>
<td>Recent successful industrialisation</td>
<td>Technological upgrade of whole economy; regional innovation system</td>
<td>Technological upgrade of sectoral strengths; small firm innovation system</td>
<td>Predominantly rural</td>
<td>High degree of regional autonomy</td>
</tr>
<tr>
<td>Norte</td>
<td>Still experiencing deindustrialisation</td>
<td>Upgrade traditional manufacturing sectors and industrial model</td>
<td>Upgrade industrial model in key sectors</td>
<td>Euro-region collaboration with Galicia?</td>
<td>Regional future driven by European/National framework with regional engagement</td>
</tr>
<tr>
<td>Ontario</td>
<td>Similar to North East England</td>
<td>'Learning region' strategy: higher wage, higher value-added and environmentally sustainable jobs</td>
<td>Targeted SME growth policy including entrepreneurship</td>
<td>Problem of scale</td>
<td>Provincial status provides greater autonomy</td>
</tr>
<tr>
<td>Piedmont</td>
<td>Similar to North East England</td>
<td>Regional image transformation and place marketing to attract knowledge class</td>
<td>Regional image transformation</td>
<td>Turin/Piedmont city region</td>
<td>Different governance levels collaborated to pursue ambitious regional goals</td>
</tr>
<tr>
<td>Styria</td>
<td>Similar to North East England</td>
<td>Cluster strategy for renewal and transformation; innovation system</td>
<td>Cluster strategy for renewal and transformation; innovation system</td>
<td>Graz city region?</td>
<td>Styrian Development Agency supported by Lander and Federal Govt</td>
</tr>
<tr>
<td>Tampere</td>
<td>Similar to North East England</td>
<td>Knowledge-intensive, sector-based strategy</td>
<td>Knowledge-intensive, sector-based strategy</td>
<td>Tampere city region?</td>
<td>Long term regional leadership</td>
</tr>
</tbody>
</table>
4.3 Cork, Ireland

The growth of the Metropolitan Cork region is a less well known part of the broader Celtic Tiger development story. The Celtic Tiger label was coined to capture the economic dynamism and growth rates of Ireland from the 1980s based on substantial FDI and drawing, in part, on the major expansion of higher education as part of the production of a highly educated and skilled labour force.

One consequence of the country’s growth has been the economic development boom of the Greater Dublin area, triggering both the problems of an overheating regional economy and regional inequality. In South West Ireland, Cork has experienced a period of sustained, if rarely remarked upon, growth to the extent that it almost matches the GVA per person of the capital region. In the main, this has been based upon the existing population and some inter-regional migration.

Economic growth in Cork has been achieved within knowledge-based manufacturing and R&D. Within a highly centralised state, the early development of a regional strategy (the Cork Area Strategic Plan) based on a loose partnership of regional and local actors has facilitated the designation of Cork as a Gateway City within the National Spatial Strategy. Gaining European Capital of Culture status in 2005 has continued the process of creating an image of the region as creative and knowledge-based.

**Key Dimensions:**

- High quality FDI and knowledge intensive investment
- Promotion of culture-led regional image strategy
- Achieved with limited local and regional autonomy

4.4 Vastra Gotaland, Sweden

The Region of Västra Götaland comprises 49 municipalities, including Sweden's second-largest city, Göteborg (Gothenburg) and has more than 1.5 million inhabitants, or about 17% of the national population. The City of Göteborg accounts for close to one-third of the region's population. Göteborg is home to the largest port in Scandinavia, and the second-largest airport in Sweden, making the city and the region important transport hubs. Göteborg is also one of Sweden's most important research centres, with large, reputable universities.

Despite the deindustrialisation of its shipbuilding and related industries and restructuring within the automotive sector, the region has made a successful transition to new knowledge-based industries. Currently, the region is the fastest growing region in Sweden with major initiatives around knowledge-based clusters, higher education and entrepreneurship. Fifty percent of all new jobs created in Sweden between 2000 and 2004 were in the Västra Götaland Region and, in 2003-2004, the region increased its business start up rate by over 25%. A natural increase and upskilling of the workforce has been supported by inward domestic migration and, most recently, growing international migration.

Strategy has developed around Regional Growth Agreements which have some equivalence to UK Regional Economic Strategies. In addition, Västra Götaland Region
is part of an official regional governance pilot in Sweden that has allowed the region to be formed by the merger of three county councils.

**Key Dimensions:**
- Successfully responded to deindustrialisation by developing knowledge-based clusters
- Rapid growth associated with human capital and entrepreneurial activity
- Strategic policy model based upon Regional Growth Agreements

### 4.5 Navarre, Spain

Navarre is a small region in the North-West of Spain that contributes 1.7% of the national GDP. In 1964, Navarre had an agriculturally based economy with 41% of the jobs in this sector. In the last few decades Navarre has experienced a rapid and successful industrialization process and is now one of the richest regions in Spain in terms of income per capita and quality of life. In 2005, Navarre was the 3rd ranked Spanish region in terms of GDP per capita, only behind Madrid and the Basque Country, both of which are much bigger regions. Navarre’s GDP per capita has consistently been above the Spanish average since the 1990s and, in 2002, its relative GDP index was 107 in EU=15. Economic transformation has seen both the retention of skills in the region and inflows into the higher education system.

Navarre, together with the Basque Country, enjoys a high degree of political and policy autonomy. The region has an above average presence of manufacturing and a productive and dynamic food sector. In recent years the Regional Government has actively and heavily promoted a regional technology plan particularly targeted at the food industry and transport (SEAT are based in the region). Overall, the creation of a regional innovation system has been targeted as part of an underlying logic that the relatively small size of firms in Navarre will not leave them enough capacity to innovate without concerted support.

**Key Dimensions:**
- Economic-step change region, reflecting a late and successful entry into the knowledge economy
- Implementation of a regional Technology Plan to upgrade the economic infrastructure across both traditional and emerging sectors
- Sectoral strengths focused around manufacturing and food& drink

### 4.6 Norte, Portugal

Norte, by population, is the largest region in Portugal (3.7m) and is the nation’s leading region for exports. Oporto is the main metropolitan area within the region centred on Porto city. In the surroundings of Porto Metropolitan Area lies a diffused industrial district economy with a strong export dynamic. Norte region accounts for 40% of Portuguese exports, principally in traditional sectors such as textiles and clothing, footwear, furniture, cork and wood products.

Overall, GDP growth in the Norte region in 1995-2003 was similar to that experienced for the EU 25. Since 2000, Norte has experienced deindustrialisation and restructuring.
driven by global competition and low productivity with its traditional sectors losing an estimated 70,000 jobs.

Within a top down structure of the EU Community Support Fund, a National Spatial Strategy and National Technological Plan, and with limited regional agencies, the region is putting in place productivity development activity centred around upgrading of the existing diffuse industrialisation model in key sectors, a limited high technology cluster policy and the collaborative development of a ‘Euro-region’ with Galicia. Overall, Norte is seeking a development model based upon the joint articulation of competitiveness, social and environmental concerns at a policy level.

Key Dimensions:
- Responded to the productivity challenge by moving traditional industries up the value chain
- Policy discrimination to match regional assets with technologically intensive activities (ICT and Biotechnology)
- Strategic interregional collaboration to develop a ‘euro-region’ with Galicia

4.7 Ontario, Canada

Ontario is the industrial heartland of Canada and a province in the Canadian federation. The province is the economic motor of its national economy, accounting for around 40% of Canada’s total GDP and employment. Historically, Canada’s national development strategy and its privileged position within the British Empire shaped Ontario’s local and regional development trajectory. Following the sequential development of NAFTA (the North American Free Trade Agreement), cross-border production networks have expanded, rationalisation has proceeded through mergers and acquisitions, and low wage and low value-added activities been outsourced to southern US states and Mexico; Ontario’s exports to the US now account for around 45% of its GDP (Courchene 2001).

This adjustment was preceded by deep recession in the early 1990s. A modest recovery since the late 1990s and early 2000s has seen economic growth and employment rates returning to national levels. Ontario has now put in place a ‘learning region’ strategy to deliver higher wage, higher value-added and environmentally sustainable jobs. Of particular interest is a targeted SME policy as part of a broader entrepreneurship agenda aimed at both the indigenous population and new migrants.

In the late 1990s, a federal government review saw a policy shift toward deliberate targeting of the 4% of existing businesses with growth potential rather than encouraging a general increase in total business start-ups. Reinforced by the political change in Ontario during the 1990s, the strategy emphasises reduced taxation, regulation and administration, equity financing and more efficient programme and service delivery. In addition, the strategy connects entrepreneurship and innovation policy in its links to the provincial Research Commercialisation Strategy.

Key Dimensions:
- Responded to deindustrialisation through the promotion of a ‘learning region’ strategy
• Targeted SME growth policy as part of a broader entrepreneurship agenda
• Prioritisation of small businesses with growth potential, whilst recognising the important output and employment created by other small businesses

4.8 Piedmont, Italy

Sitting within the Piedmont region, the city of Turin (population: 900,000) has been a major centre of Italian industry since the 19th century, and came to be dominated in the twentieth by FIAT and the automotive industry. The first major problems for the city appeared in the 1970s, with substantial lay-offs taking place at FIAT and associated firms. The 1980s proved disastrous again for Turin when Fiat moved the core of its production activities to Melfi in Southern Italy; nevertheless FIAT still employs around 15,000 in the region, not including an associated components sector. Over the years, diversification projects have been instigated with some success but “Fiat city” has remained the dominant image.

The late 1990s saw a successful collective and long term effort to transform Turin’s future. Local politicians stopped infighting and were able to craft a degree of consensus to prioritise Turin’s turnaround by focusing on a vision for a new Turin: that of an international, rather than an automobile, city. In May 1998, the Mayor of Turin launched the strategic development plan for the City. The plan charted a future scenario for the city over the following ten years, including elements of economic development, tourism promotion, a cultural strategy and governance reform. The plan was drawn up after 20 months of consultation, based on contributions from the city’s main institutional, social, economic and cultural actors and was also closely tied with preparations for the 2006 Winter Olympics.

A second development plan is in development. Meanwhile, Turin/Piedmont has continued to attract FDI at a proportionate level, has seen significant expansion of visitors and bed nights over the last few years and, for the first time ever, international publication of guides to the city and region. The latest aim is to use its transformed image to attract a new investment round of knowledge work and workers.

Key Dimensions:
• Industrial heartland undergoing a long-term ‘regional image transformation’
• Institutional innovation and collaboration towards a shared vision
• Place-marketing to attract ‘knowledge work and workers’

4.9 Styria, Austria

Styria remains one of the industrial heartlands of the Austrian economy with 33% (approx. 140,000 workers) of its employment derived from both primary and secondary activities. Styria’s industrial role within Austria developed in the 19th century around coal, iron and metal products and continued as a national growth pole in the post-war period. By the 1980s, Austria’s state owned industries had entered a period of crisis leading to a decade of intensive restructuring, diversification, privatisation and rationalisation. The most severe economic impacts were felt in Upper Styria, an area which eventually became the largest recipient of EU Objective 2 funds in Austria.
Yet, from the early to mid 1990s, the region has shown signs of emerging growth and economic renewal, especially around the Graz city-region - the economic and political centre of Styria. Since the 1990s Styria has experienced a ‘catching-up’ process within Austria, especially in terms of growth, employment, new firm formation and innovation. Applied research, technological transfer and a clear focus upon the synergies between industry and research have stimulated the renewal and growth of key sectors such as vehicles and transport, metals and machinery, wood/paper, chemicals and pharmaceuticals and ICTs. Between 1995-2002 Styria experienced average annual growth rates (Gross Regional Product) of 3.6% and, in 2004, the region had the highest annual GRP growth rate in Austria (3.8%).

At the heart of this transformation has been the Styrian Development Agency (SFG) and the regional cluster policies first instigated in 1994. Sitting within a broader regional innovation system concept, Styria represents one of the most striking examples of successful cluster policy in the world – and one directed at existing sectoral strengths.

**Key Dimensions:**

- Cluster strategy central to industrial renewal and transformation
- Sectoral growth model integrated within a broader *regional innovation system*
- Traditional industrial strengths manoeuvred up the value chain

### 4.10 Tampere, Finland

Tampere is the traditional industrial heartland of Finland. In the early-post war period Tampere witnessed several decades of high-growth, high-volume industrial activity. Yet between 1956 and 1988 employment within the textiles, clothing, footwear and leather industries was reduced from 18,000 to just 3,900 jobs. Worse was to follow when, from 1991-1994, Finland entered into a deep-seated recession. Between 1990 and 1993 the employment base of Tampere contracted by around 27,000 jobs (from 129,197 to 102,353 jobs).

Subsequently, Tampere has experienced a ‘step change’ in economic performance through the enforced modernisation and renewal of its engineering base and the growth of new and rapidly expanding business sectors. In just under a decade, from the end of the recession in 1994 to 2002, employment grew by over 38,000 jobs in the city region (Statistics Finland 2004). In 2003 Tampere city’s employment growth was the fourth fastest of all major Finnish cities, reflecting a 5 year increase of 3,500 jobs.

Restructured sectors include the now highly internationalised mechanical engineering and automation industry which employs almost 17,000 people in the Tampere region with an annual turnover in excess of €2billion. New sectors include the ICT sector, media, and new media employing around 15,500; the Nokia Group alone employs almost 4,000 workers, mostly within R&D related activities. These industries are part of a broader set of knowledge intensive sectors drawing on Tampere’s education, research and technological support structure. By 2000, there were more university students in Tampere (25,000) than industrial jobs (22,000). This transformation has seen the conversion and upgrading of the indigenous skills base and growing inter-regional migration of students; international skills are now being targeted.
The Tampere Region Centre for Expertise Programme (TRCE) was the central policy intervention operating during the city-region’s step-change recovery in the late 1990s. The TRCE programme is situated within the national Centre of Expertise Programme launched in 1994 to allocate funding and strategic status to localities which represent centres of internationally competitive business and research within selected fields. Unlike previous forms of Finnish regional policy, the Centre for Expertise programme aimed to identify and strengthen regional strengths rather than address regional weaknesses. Critically, however, Tampere’s success within the programme built on earlier key decisions of strategic leadership and investment based on the relocation of two universities to the region who were deliberately encouraged to be outward facing to industry and the core of a regional educational and research base.

Key Dimensions:

- Knowledge intensive growth model focused on engineering and science
- Sector-based strategy to prioritise and developed regional strengths
- Key role played by strong strategic leadership in developing new paths for growth

4.11 The Rejected Case Studies

It was decided that the case studies listed below would not be developed further:

- Lille, France: An intervention based on building on the strategic advantage created by the arrival of the TGV high speed link. It was argued that the region was unlikely to see a transport intervention of such magnitude around which a node of development could be created.
- North Carolina, USA: A previously non-industrialised region which is now reaching maturity based on high technology sectors as the basis for a ‘smart growth’ agenda of sustainable development. The region’s short industrial history focussed on rounds of high technology investment was seen as too removed from the experience of North East England.
- Queensland, Australia: A region which has achieved undoubted step change growth driven both by its strategic position within the Asia Pacific and unprecedented and sustained levels of public sector investment in research and knowledge infrastructures (‘the Smart State programme’). The level of investment undertaken by the public sector was viewed as of an order that was unachievable within the current UK policy framework for regional development
- Saxony, Germany: An industrial heartland which has undergone a major adjustment and renewal programme in the face of re-unification, post-socialist transition and de-industrialisation. Despite some notable success the region retains high levels of unemployment. The case study was excluded due to the inability of the policy intervention to reduce levels of unemployment.
5 REGIONAL CASE STUDIES: COMMON THEMES

As outlined in Section 2, a Workshop was held attended by the Study Team and ONE representatives and whose aim was to distil a set of Common Themes in international regional development from comparative analysis of the Case Studies. These themes are presented below.

5.1 Theme 1: Modes of Development or Growth Models

A variety of lessons can be highlighted under the general theme of the model of regional development that has been realised across the case study regions.

- **Adaptation and renewal can be achieved**: in the face of globalisation and relentless competition, a range of regions have been able to respond to the legacy of de-industrialisation and achieve new periods of economic growth. Navarre, in Spain, has seemingly successfully industrialised in the face of inter-regional competition at a global scale.

- **Considered and realistic appraisal of the regional asset base**: the case studies provide evidence of sustained research and strategic appraisal of the ‘existing state of the economy’; for example, assets to adapt (manufacturing base), assets to evolve (emergent sectors, higher education institutions), assets defined in relation to regional position within the national or European polity (Cork within the Celtic Tiger; Euro-Regions); and unrealised assets (for example, under-represented groups within new firm formation).

- **Diversity of new pathways**: development pathways have involved both adaptation (Styria) and the targeted shift to new sectors (Tampere); and in many instances a balance of the two (Norte, Ontario).

- **‘Balanced, rounded or inclusive growth?’**: virtually all the cases implicitly focus on a ‘narrow’ economic agenda; Norte stands out in its broader statement of economic, social and sustainable development (as does possibly Ontario). Relatedly, most cases target high skilled and value added employment (in contrast, for example, to raising participation rates).

- **Sectoral adaptation**: within a common trend of the shift to service-orientated economies, virtually all the cases highlight the continued prospects for manufacturing growth – in other words, manufacturing can still matter. Generally, for it to do so, requires a drive towards higher value added activities.

- **‘Geo-political’ adaptation**: In virtually all cases, an underlying theme of economic adaptation (reflected in, for example, changing export markets, sources of FDI or labour force) is evident with the creation of new positions as gateways or corridors, or of centrality or peripherality, within supra-national political configurations such as (the expanding) EU or NAFTA.

- **The geography of growth**: Turin/Piedmont stands out as a case study in which the city was the focus for regional development (and Norte/Oporto to a lesser extent). Other examples do not, as currently configured, suggest intervention at the city (or city region?) level as the driving force of regional change.
The institutional framework for development:
- the variety of governance frameworks within which regions sit (centralised, federal, fragmented, Euro-region, etc.) has not prohibited regional dynamism and institutional innovation; “its co-ordination not institutions”
- nevertheless, the case studies point to greater promotion of innovation and dynamism within contexts of devolved power (Navarre, Ontario, Styria)

The role of EU Structural Funds: across a number of cases, the additionality of resources provided by Structural Funds has acted as a driver of development

5.2 Theme 2: Modes of Intervention
The case studies exhibit a range of lessons concerning the development and implementation of interventions.

- **Leadership**: the public sector has played a key role in, and/or delivered, regional leadership across the case studies.

- **Strategic, long term (and collective) vision**: a sustained and evolving vision based upon an agreed and sophisticated analysis of ‘the regional problem’ drawing from comprehensive, coherent and consistent research activity and evidence (for example, Cork or Tampere).

- **‘Tailored policy’**: with an agreed strategy and vision in place, the potential exists to tailor regional and local policy whether through regionally-driven activity, ‘bending’ supra-regional activity to meet regional priorities or ‘regionalising the national’ (placing regional priorities within aspatial national policy).

- **Intervention programmes**: the following programmes can be identified:
  - Business development (sectoral/district/cluster/SME/), and more broadly including clear evidence of the major role of high quality FDI (foreign direct investment)
  - Regional science and technology policy (including policies directed towards innovation, a key role for higher education and that public sector R&D is a key driver)
  - Aspects of skills-led economic development (at differing skill levels and, again, focused on higher and further education)
  - Regional image and the business of culture: growing in significance and popularity, including the expansion of activity around telling or marketing ‘the regional story’
  - The culture of business: for example, high entrepreneurship rates or HEI and business interaction

- **Programme synergy and interdependence**: the combination, co-ordination and integration of complementary programmes is evident but difficult to clarify and evaluate at this level of analysis; for example, in the cases of Turin and Cork the role of image/culture in attracting knowledge workers is posited.
Institutional support: the case studies exhibit the development of a range of institutions in the delivery of interventions; the evidence is not ‘one institution fits all’ but the alignment of appropriate institutions (in terms of leadership, resources, autonomy, stakeholder engagement, capacity, etc.).

Comparison with ONE draft Regional Economic Strategy: the draft Strategy is structured around a statement on Vision and Collective Leadership that provides the context for Action within three domains: Business, Skills and Place. Comparison with the Case Studies highlights similar programme coverage bar certain interventions (physical infrastructure, connectivity) found under ‘Place’ which play a secondary and supporting role to interventions across the case studies.

5.3 International Peer Review

Three peer reviewers - Professor Susan Christopherson (Cornell University, USA), Professor Robert Hassink (University of Oslo, Norway) and Professor Andres Rodriguez Pose (LSE, United Kingdom) – were commissioned to review and comment upon the international case studies under development as part of the Study.

The Peer Reviewers were provided with Guidance Notes which can be summarised as:

- Use your International Experience
- Act as a Sounding Board
- Validate the Case Studies
- Develop the Common Themes

5.3.1 Doing Comparative International Case Studies

The reviewers commented upon the difficulties and potential pitfalls of trying to extract common themes from diverse case studies in different national contexts.

Different socio-economic situations in each of the regions, and the diverse institutional settings in which development strategies are devised, imply that conclusions extracted from the analysis of the case studies should be interrogated carefully. Interregional institutional learning is poorly understood as a process with such variables as regional economic structure, institutions and cultures, as well as time lags, all critical to a contextualised understanding of ‘what works’. In particular, the national context for regional success stories was highlighted14.

Furthermore, as one reviewer wrote, defining success in economic development is also not an easy task. Whereas economic growth is generally regarded as the most common indicator of success, some development strategies that deliver high rates of economic growth do not necessarily lead to success, as the initial spurt of economic growth may be short lived or unsustainable. In other cases, lack of economic growth does not necessarily mean that the strategy is a failure. Achieving greater social inclusion, improving the quality of jobs, or setting the bases for future economic and

14 Peer reviews were undertaken prior to the results of the regional benchmarking exercise which provides some national context for regional performance (see Section 3)
environmental sustainability may not guarantee as many headlines as high economic growth, but will definitely contribute to a successful medium-term development trajectory.

Despite these caveats, reviewers were very supportive of the aims of the Study, its operationalisation and the balance of facts and critical assessment provided in the Case Studies documentation.

5.3.2 Comments on the (Choice of) Case Studies

The reviewers disagreed amongst themselves on the shortlist of Case Studies. For one, all eight cases represented extremely pertinent examples from which lessons could be extracted to support economic development policy aimed at addressing the structural problems of North East England. At the other extreme, a reviewer questioned the relevance of Navarre, Spain (no similar history), Norte, Portugal (different industrial structure) and Ontario, Canada (central location and industrial structure).

Comments on individual case studies are as follows:

**Cork**

- Interesting case of how smaller and relatively distant cities and regions have contributed to the development of the Celtic Tiger.
- The need to distinguish between success based on Irish dynamism or local place specific factors or, put another way, a case of national investment with a strongly positive regional outcome.
- Particular issues for greater interrogation are the ability of Ireland to use structural funds effectively and to what extent FDI has been embedded in ‘actually existing clusters’

**Gothenburg/Vastra Gotaland**

- An attractive case of reversal of industrial decline in a relatively short timespan
- Striking example of the apparent ability of the city and region to restructure regional governance institutions to meet the needs of the new economy
- Public investment in communications infrastructure
- Too optimistic on policy influence?

**Navarre, Spain**

- Peripheral region adapting to the challenges of economic restructuring and integration into wider markets.
- There is a stronger industrial (rather than agricultural) legacy than one might realise and the case highlights how the legacy of knowledge and workforce skills have been developed to construct a role in the regional economy based upon dynamic clusters of SMEs.
**Norte, Portugal**

- Peripheral region adapting to the challenges of economic restructuring and integration into wider markets.
- With intra-regional loss of population a question as to whether or not economic resurgence isn’t highly localised.
- Overall, weakest case with heavy reliance on EU Funds and branch plants raising questions about a sustainable regional economy.
- Cross-border cooperation could be a positive development but scepticism as to true extent of this beyond initial fund chasing activity.

**Ontario, Canada**

- A territory that has superseded a series of structural challenges to remain competitive and dynamic.
- Is distinctive within case studies due to global city status of Toronto.
- Clear and supported SME focus within such a ‘global region’ is unusual.

**Piedmont/Turin**

- Internationally distinctive case in its city marketing and image change basis for regional development.
- Would seem to have ‘overcome’ institutional lock-in and the broader issue of city-region relationships is foremost within this example.
- Learning and leadership have been to the fore and a strong sense of regional identity and assets infused this case.
- Its successful transition remains to be proven.

**Styria, Austria**

- A clear, and successful, strategy based upon revamping of existing manufacturing sectors through a cluster approach.
- Importantly, the legacy was state developed human resources and research capacity.
- The internal relationships of the industrial system – small/large/university/college – hold clear implications for policy development.

**Tampere, Finland**

- A city that has successfully reversed industrial decline in a relatively short time span.
Critical question as to how a skilled workforce was maintained and renewed

One answer is the coherent and sustainable regional innovation system in place

A broad stakeholder-based approach suggests both a higher level of inclusion and a more sustainable development path

5.3.3 Comments on the Common Themes

The reviewers commented across, and developed, a number of the Common Themes developed from the Case Studies.

Theme 1: Modes of Development or Growth Models

- **Adaptation and renewal can be achieved:** one reviewer argued that whilst this might be the case the report is too optimistic in its tone concerning the role of policy interventions in realising such renewal

- **Considered and realistic appraisal of the asset base:** identified as a critical step and reflected in evidence for virtually all the regions basing development strategies on existing sectors to some extent. The development of sound local development strategies based on a thorough assessment of the local socio-economic structure, potential, competitiveness and vision for the region is a foundation for economic management and performance.

  The question was asked as to who carries out this appraisal to deliver honest and genuinely informative results. This is especially so within the context that building on assets still implies stark choices to discriminate between those areas of the economy deemed to have a greater future in a more integrated environment and those regarded as ‘wither on the vine’ activities.

- **Diversity of new pathways:** reviewers re-stated the plural pathways to development undertaken (including the high road of R&D and high-tech or medium/low road; existing clusters; FDI, SME prioritisation).

  Similarly, this is more than ‘manufacturing matters’ and the transition from manufacturing to service jobs. What the cases highlight is building on the legacy of skills and research capacity associated with old regional industries.

- **‘Balanced, rounded or inclusive growth’?** One reviewer re-interpreted this theme as the presence of incremental and balanced strategies amongst the cases (as against ‘breaks with the past’). Existing assets and sound diagnosis of local conditions directs policy to intervention within ‘bottlenecks’ that limit potential development leading to a series of measured and balanced strategies.

  Nevertheless, another reviewer questioned the evidence within cases in assessing impact on the broader economic and social welfare of the region and attaining sustainable regional economic development.

- Other generic comments on the content of the strategies described in the case studies were:
  - Cross-border collaborations are often dependent on significant infrastructural investment
  - Strong emphasis on human resources (and universities/colleges as the vehicle for delivering adequate education and skills). This is
What Works in International Regional Development

nuanced by achieving a match between the supply of skills and the demands of the local economy

- Focus on innovation: across the cases the aim is to create ‘territorially embedded’ innovation systems suited to local socio-economic characteristics
- The role of universities – skilled labour, basic knowledge, innovation source, FDI attraction – within high-tech road to development strategies.
- Better targeting of FDI to create production chains (forward and backward linkages within regional economic system)
- Emphasis on clusters and sectors: the use of these as frameworks for the delivery of policy within business support, innovation, skills, FDI, etc.

Theme 2: Modes of Intervention

- A strong emphasis on governance: Institutional settings among the case studies vary greatly but an emphasis on governance to achieve successful development strategies is common. Horizontal and vertical collaboration across scales/tiers of government is put in place (and not necessarily devolved power).

A key potential outcome of governance systems matched to a regional growth model is the ability to align both direct and indirect investments from multiple scales of government (EU, national, sub-national, place specific) to spur growth and reduce fragmentation.

- Leadership: Good leadership is a motor of development but can be delivered in a variety of institutional forms and through a range of key actors (including individuals)
6 RECOMMENDATIONS

Recommendation 1: Develop the regional capacity to deliver sustained, strategic and independent appraisal of the economic development challenges facing the North East England.

The production of sound development strategies based on a thorough assessment of the region’s economic profile and potential is a foundation for addressing the regions’ economic development challenge. Sustained analysis and understanding of the nature of the regional problem of North East England is a critical first step prior to:

- Adoption of a realistic economic development model and vision
- Realistic appraisal and assessment of the regional asset base and socio-economic structure
- Assessment of regional competitiveness and potential

One NorthEast is the strategic economic development body of the region tasked with providing leadership in economic policy making within the region and acting as the catalyst for appropriate intervention. A central element in this task is being clear about the model of economic development which the region is seeking to adopt and the values that underpin this. As such, the Agency needs to be placed at the centre of a sustained programme of research that provides it with the analytical and evidence gathering capacity to provide strategic leadership over time. Several case studies including Cork, Styria and Tampere provide evidence for the important role that such strategic capacity can play in the pursuit of successful economic development.

As the centre of any regional capacity, ONE should seek to build a balance between internal competence and external expertise including independent and ‘critical friend’ input and external validation. This capacity should incorporate an international dimension allowing for the appropriate identification of lessons and good practice from international comparison.

The region has in place a number of elements of such capacity including, for example, FutureMatters, IPPR North, NERIP, inter-RDA and city/LA learning networks, access to international consultancies and, importantly, international expertise within the region’s universities. The key task is to develop a more coordinated framework which can ensure the maximum value can be derived from this capacity. ONE should develop a framework to utilise these assets to provide both a learning agenda and strategic capacity for the organisation. In addition, it should seek to extend this framework to encompass its regional partners.

In time constructive, sustained and informed dialogue can be expected to contribute to a broader policy learning agenda within the region, the development of Strategic Added Value across the region’s strategy making institutions and collective regional understanding of the nature of the economic development challenge and potential solutions.

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15 Such a capacity could be argued to be the first element of the ‘strategic maturity model’ called for in the evaluation of the previous RES (ONE, 2005, Evaluation of Realising Our Potential)
Recommendation 2: Continue to develop the evidence base to support the case for increased regional autonomy and discretion in policy making within the context of national policy frameworks

The case studies provide evidence for a plurality of economic development pathways. It remains unclear as to what extent ONE has scanned the potential economic pathways\textsuperscript{16} open to the region including, for example, the balance of adaptation versus a break from the past, the balance of economic, social and environmental goals, the geo-economic position of the region within the new global order and interventions geared towards drivers of change. Each of these approaches has implications for the geography of development in the region and regional actors need to be clear about the degree to which sectoral or geographical focus is most important for future development.

Put plainly, what is the economic role that we expect of North East England within the world, Europe and the UK? Should it’s strategy be driven by closing the productivity gap within the UK, especially when evidence suggests many key drivers of change are influenced more by national, than regional, factors and there is little evidence to suggest that doing the same as the other UK regions will ‘close the gap’.

Accepting the constraints of a national policy framework, what are the options for tailoring policy to meet the regional needs of North East England and its goal of ‘a high quality of life…and dynamic economy’ (Draft RES Vision)\textsuperscript{17}? What are the alternative potential shared economic models\textsuperscript{18} identified as missing in the evaluation of the previous RES. Do these models imply an economic development policy based on distinctive ‘quality-based’ assets (such as high level of skills, technology, etc) or more generic assets (such as low taxation and labour costs)? To what extent is the strategy based on promoting, for example, ‘smart growth’, emphasising the importance of FDI, cluster development, a search for global region scale, emphasising sustainable development strategies, etc.? Fashionable elements of these models are identifiable in the RES but how do these synthesise to create a distinctive and realistic model of development for North East England.\textsuperscript{19} The case studies demonstrate a range of possible strategies ranging from a continued emphasis on (high quality) FDI (Cork) through to an emphasis on the promotion of SMEs (Ontario) to renewal of existing industries (Styria). In all cases though, successful regions appear to judiciously combine and mobilise indigenous and exogenous assets.

Recommendation 3: Regional economic strategies are about prioritisation

Comparison of the draft RES against the case study evidence suggests that most intervention activity identified at an international level is to be found within the pages of the draft RES. The question remains as to whether this represents a strength or a

\begin{itemize}
  \item We use the term pathways as a broader concept than that of the different ‘rates of growth’ scenarios developed for ONE as part of the production of the RES (ONE, 2003, Positive Scenarios for the North East Economy. Available at \url{http://www.onenortheast.co.uk/page/resevidence.cfm})
  \item ONE, 2006, Leading the Way: Regional Economic Strategy Consultation Draft, Vision, p.6
  \item ONE, 2005, Evaluation of Realising Our Potential, p.48
  \item Creating the capacity of the regional policymaking body to ask such questions of itself and undertake strategic choice is, of course, the focus of Recommendation 1
\end{itemize}
weakness. Case study evidence would suggest do less but with greater understanding of why. The case studies provide strong examples of regions that have prioritised particular strategies over a long period. In the Cork case the strategic priority to upgrade and embed FDI in key sectors has meant that the region has remained a focus for high quality, knowledge-based FDI in its key sectors. In Gothenburg the emphasis has been on science-led developments. In Ontario the province has made a radical decision to prioritise resources on high growth SMEs. In each case the evidence-base and economic intelligence that has underpinned these decisions has been impressive.

Strategy should be about analysis (see Recommendation 1) and explicit and informed choice (see Recommendation 2). The choice of development pathway and economic model should provide the framework for regional priorities – what goals are being sought, through what intervention mechanisms, applied to which regional assets. These priorities, in turn, should provide the framework and criteria for programme and policy choice, monitoring and evaluation frameworks, and output and outcome targets.

Prioritisation is not without risk but the balance of risks across a set of interventions can be assessed.

The case study evidence provides some guidance in the process of prioritisation:

- Evolution, not revolution: incremental and balanced, not over-ambitious, goals
- Target drivers of growth rather than begin with a concern for intra-regional geography
- Target value-added activities (whether manufacturing or services)
- Balance, align and positively integrate indigenous and exogenous sources of growth
- Infrastructure investment and place development as a means to an end; implemented as part of programme activity justified on the basis of drivers of growth

**Recommendation 4: Evolve your regional assets**

In virtually all the cases, development pathways have been based upon selective evolution of assets (infrastructure, critical mass, knowledge, skills, market penetration, etc.) derived from the regional legacy of previous rounds of economic development. There has undoubtedly been a tendency in the North East in the past to disregard the potential of ‘old industries’, particularly manufacturing. The manufacturing sector remains ‘over-represented’ in the regional economy partly through foreign-direct investment that has contributed to a broadening of the manufacturing base including areas such as automotive, offshore, pharmaceuticals and biotechnology. All offer strength in technology and skills and exemplify the asset base of enterprise, innovation and employment evident within existing industry. The task of strategy is to build on existing assets wherever possible - identifying innovative possibilities as well as developing entirely new activities - and attracting and embedding exogenous resources, ideally in ways that generate positive externalities from which existing firms can benefit.
Recommendation 5: The Study reaffirms the policy drive within the draft RES for a unified regional governance system offering leadership and vision

International experience highlights the significant role that regional leadership can play within economic performance. No one governance model dominates but in most cases an institutional infrastructure that aligns horizontal and vertical tiers of government to collaborate (and invest) around shared goals has contributed to effective strategy, efficient implementation and enhanced regional performance. In many cases, the development of regional capacity has run in parallel with the development of enhanced collaborative governance. In each case study, key institutions have taken on a wider leadership role in animating strategies, through the development of evidence and promoting consensus (such as IDA Ireland in Cork and SFG – the Styrian Development Agency – in Austria).

Within the UK environment, Regional Development Agencies (through the strategic mechanism of the RES) are well placed to fulfil the role of leadership and vision.

Recommendation 6: That One NorthEast uses the Common Themes and Case Studies of What Works in Regional Economic Development to inform future policy action

This report provides the most recent addition to the evidence base on, and for, regional development available to One NorthEast. At this point in time (and stage in the policy cycle) it is recommended that the Study act to inform at least two activities. First, the Study is utilised both within the Agency and across its regional partners as part of the policy learning agenda and development of strategic capacity (see Recommendation 1). Second, the Study is used to inform the development of future actions, including progression of the RES Action Plan.
ANNEX 1: DATA SOURCES FOR REGIONAL BENCHMARKING
<table>
<thead>
<tr>
<th>Coverage</th>
<th>Topic</th>
<th>Source</th>
<th>Table</th>
<th>Additional notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employment Rate</td>
<td>Eurostat Regions: Regional Labour Market – Regional Employment LFS series</td>
<td>Employment rates by sex and age, at NUTS levels 1 and 2</td>
<td>Data available from 1999 to 2004, missing data within some regions.</td>
</tr>
<tr>
<td></td>
<td>Employment by highest level of attainment</td>
<td>Eurostat Regions: Regional Labour Market – Regional Employment LFS series</td>
<td>Employment by sex, age and highest level of education attained, at NUTS levels 1 and 2</td>
<td>Data available from 1999 to 2004 and is fairly comprehensive across regions</td>
</tr>
<tr>
<td></td>
<td>Employment in technology and knowledge-intensive sectors</td>
<td>Eurostat Regions: Science and Technology - Employment in High Technology sectors</td>
<td>Annual data on employment in technology and knowledge-intensive sectors at the regional level</td>
<td>Data available from 1994 to 2004, missing data within some regions.</td>
</tr>
<tr>
<td></td>
<td>Patent Applications</td>
<td>Eurostat Regions: Science and Technology - European patent applications to EPO</td>
<td>Patent applications to the EPO by priority year at the regional level</td>
<td>Data available from 1997 to 2004 and is fairly comprehensive across most regions.</td>
</tr>
<tr>
<td></td>
<td>Labour Force</td>
<td>Australian Bureau of Statistics: Labour Force</td>
<td>6202.0.55.001 Labour Force, Australia, Spreadsheets. Table 12 Labour force status by Sex – States and Territories.</td>
<td>Downloads are free and time series data is available. Labour force survey includes all persons aged 15 years and over.</td>
</tr>
<tr>
<td>Canadian Provinces</td>
<td>Gross Domestic Product</td>
<td>Statistics Canada: National Accounts</td>
<td>Table 384-0002: Gross Domestic Product, expenditure-based, PEA; Canada; Current prices; Gross Domestic Product (GDP) (Dollars - Millions) [D24193]</td>
<td>Data is freely available from 2001 – 2005, to access historical data you need to access the CANSIM database for a fee of $3 per series. Gross Domestic Product figures were deflated to reflect constant prices using OECD Factbook 2006: Economic, Environmental and Social Statistics: GDP deflator.</td>
</tr>
<tr>
<td>Employment Rate</td>
<td>Statistics Canada: Labour Force Characteristics</td>
<td>Table 282-000211,12 Labour force survey estimates (LFS), by sex and detailed age group, annual (Persons unless otherwise noted)</td>
<td>Data is freely available for 2005 only, to access historical data you need to access the CANSIM database for a fee of $3 per series. Note: the LFS covers the civilian, non-institutionalised population 15 years of age and over</td>
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<tr>
<td><strong>American States</strong></td>
<td><strong>Gross State Product</strong></td>
<td>Bureau of Economic Analysis: Regional Economic Accounts</td>
<td>Gross State Product (millions of current dollars)</td>
<td>Downloads are free and data is available historically, tables are derived interactively on-line. Gross State Product figures were deflated to reflect constant prices using OECD Factbook 2006: Economic, Environmental and Social Statistics: GDP deflator.</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td>US Department of Labour Bureau of Labour Statistics: State and Local Employment</td>
<td>State and Area Employment, Not Seasonally Adjusted, All Employees.</td>
<td>Downloads are free and data is available historically, customised tables can be created on-line. In order to calculate employment rates population estimates were used from the Population Division, U.S. Census Bureau <a href="http://www.census.gov/popest/datasets.html">http://www.census.gov/popest/datasets.html</a></td>
<td></td>
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</tbody>
</table>

**Resources:**

Eurostat: [http://epp.eurostat.ec.europa.eu/portal/page?_pageid=0,1136162,0_45572076&_dad=portal&_schema=PORTAL](http://epp.eurostat.ec.europa.eu/portal/page?_pageid=0,1136162,0_45572076&_dad=portal&_schema=PORTAL)

Statistics Canada: [http://www.statcan.ca/start.html](http://www.statcan.ca/start.html)


The OECD’s [http://www.oecd.org/home/0,2987,en_2649_201185_1_1_1_1_1,00.html](http://www.oecd.org/home/0,2987,en_2649_201185_1_1_1_1_1,00.html) Territorial Database provides internationally comparable indicators on key socio-economic issues at the regional level. The database covers: population, ageing, GDP per capita, employment by main industries, unemployment rates by age and sex. The data is collected in 4 waves: wave 1 (about 1980); wave 2 (about 1990); wave 3 (about 1995) and wave 4 (about 2000).
ANNEX 2: THE REGIONAL CASE STUDIES
## Cork, South West Ireland

### Population:

<table>
<thead>
<tr>
<th>Area</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cork City</td>
<td>123,000</td>
</tr>
<tr>
<td>Metropolitan Cork city region</td>
<td>257,000</td>
</tr>
<tr>
<td>South West Region</td>
<td>580,605</td>
</tr>
</tbody>
</table>

### GVA (‘v’ national):

- South West Region output at basic prices: 22,377 €mn (2002)
- South West Region GVA per capita ‘v’ national: 131.3 (national = 100)
- South West Region GVA per capita ‘v’ EU25: 174.6 (EU25= 100)

### Employment rate (‘v’ national):

- Cork City: 52.3% (2002) (national 58.3%)
- County Cork: 57.8% (2002) (national 58.3%)
- South West Region: 59.6% (2005) (national 61.5%)

### Unemployment rate (‘v’ national):

- Cork City: 12.4% (males: 14.2%; females 10.1%) (national 8.8%) (2002)
- Cork County: 6.4% (2002) (national 8.8%)
- South West Region: 4.2% (2005) (national 4.2%)

### Sectoral structure:

- Agriculture, forestry and fishing: 20,500; 640 €mn
- Manufacturing, building and construction: 83,300; 13,781 €mn
- Services: 174,000; 8,149 €mn

### Economic History

Cork is the second largest city in Ireland. Through most of the 20th century (following independence in 1921 and subsequent civil war) Ireland experienced decades of

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20 Ireland is divided into two NUTS II regions, which are the Border, Midland and Western; South and Eastern. NUTS III regions include: Dublin (e.g. Dublin city); Mid-East (e.g. Kildare); South East (e.g. Waterford); South-West (e.g. Cork) and Mid-West (e.g. Limerick). Limited data is available below NUTS III and therefore the South West region, including Cork and Kerry, serves as a proxy for the performance of Cork and its metropolitan region.
comparative economic stagnation. Protected behind tariff barriers the Irish economy relied on its home market to a great extent. The standard of living was poor by European standards and emigration was endemic. Cork was part of this general experience.

Historically, Cork City has functioned as the Capital of Munster, and an international gateway to the South West Region. The city is regarded as the key (but not sole) driver of the prosperity of a very wide region. Cork had developed from medieval times around its large natural harbour and in the 18th and 20th centuries was also the location of generally small and inefficient manufacturing firms. Many smaller enterprises were also engaged in the textile, agricultural processing, chemical and printing industries. The abandonment of protectionism from the end of the 1950s exposed these firms to international competition to which local firms in general struggled to adjust. The closures of Fords and Dunlops in the early 1980s were symptomatic of the city’s economic devastation during the late 1970s and 1980s with indigenous industries unable to compete with foreign enterprises which had freer access to the Irish market following EEC membership. In common with other parts of Ireland, thousands of young Cork people were forced to emigrate in search of work while unemployment rose to levels not experienced since the early 1950s.

Recent Economic Change

Since 1980, Ireland has attracted 27 per cent of all US manufacturing investment in Europe and 40 per cent of all US electronic investment in Europe. The country has seen a massive growth in higher education: in the ten years, up to 1998, the number of students in full- or part-time third level courses increased by 72 per cent whilst the number of post graduate students more than doubled. Today, Ireland has the highest number of computer science graduates per 100,000 in the OECD and is now a location of choice for eight of the world’s top ten software companies. Moreover, 60% of all third level students graduate with science, engineering, or business degrees, and a significant number are proficient in more than one language.

Despite the general slowdown of FDI in Western Europe, IDA Ireland reported that 2005 was its best year since 2000 in terms of the range and quality of new investments, the development of research capability and capacity, and in job creation. In particular, the IDA has a good recent record in attracting FDI-based R&D. Some 50 R&D investment projects were supported by IDA Ireland in 2005 involving a total investment by business in excess of €260m — a record in number and value, and an 85% increase in value from 2004.

All these figures exemplify the emergence and continued development of the Celtic Tiger - a complex and interrelated set of economic, social and political changes which occurred from the end of the 1980s and which underpinned a rapid increase in Irish growth rates and made the country highly attractive to FDI. Metropolitan Cork is an interesting dimension of the Celtic Tiger. Much recent Irish growth has been concentrated in the greater Dublin region yet Cork’s relative performance has been strong, if little analysed. However, due to data restrictions below NUTS III, sub-national indicators of economic and social change remain confined to 'regional level'
statistics\textsuperscript{21}. The South West region (NUTS III) contains both Cork County and Kerry, and therefore the following indicators of recent economic change across Cork and its metropolitan region are inferred from the regional level. Nevertheless, the following dimensions indicate Cork’s role with a broader regional economic change (CSO 2003; Edwards and Lineham 2005; Fitzpatrick Associates 2006):

- **Population**: Between 1996 and 2002 the South-West region gained 18,412 people through cumulative net migration and projections suggest that the region will experience a further increase in population of 124,000 by 2021, with external migration providing 50,000 individuals. However, Cork City’s population declined by 3.2% during the same period. The decline within the city appears to reflect a migratory movement of younger families to beyond the city’s boundaries.

- **Unemployment**: Between 1996 and 2005 the rate of unemployment within the South West fell by 7.6%, from 11.8% to the national average of 4.2%. Indicative of this regional pattern, Cork City’s unemployment almost halved between 1996 and 2002, from 22.5% to 12.4%. However, despite the overall fall in unemployment, Cork City houses 11 of Ireland’s 88 worst unemployment black spots. The eight black spots generate an average unemployment rate of 24.7%.

- **Labour Force Participation**: Using ILO participation rates, the South West region has witnessed a 7.0% rise in rates of employment between 1996 (52.6%) and 2005 (59.6%). At the level of Cork City, between 1996 and 2002 the participation rate increased by 1% to 52.2%, this modest growth was in part stimulated by higher rates of growth within the female workforce (4.1%), almost double the growth rate of males.

- **Regional Output (GVA) and Basic Prices (€mn)**: Between 1996 and 2002, the South West region experienced the highest rate of growth in GVA across Ireland. A 178.3% hike in output exceeded the national growth rate of 119.3%. By 2002 the South West region exceeded the national average of GVA per capita by 31%, almost 16% percentage points above the Greater Dublin Area.

- **Sectoral Employment**: Between 1996 and 2005 employment within Agriculture, Forestry and Fishing reduced by 28.6%, by far the highest decline across Ireland. In contrast, the region witnessed significant growth across the Manufacturing, Building and Construction Sector (49%) with employment increasing from 55,900 to 83,300 by 2005\textsuperscript{22}. Between 1996 and 2005, employment within the South West’s service sector grew by 59%, to 174,000, indicative of the state’s average growth rate of 56%.

- **Disposable Income**: Despite rapid rates of growth in productivity and employment the South West region experienced a 1.5% reduction within

\textsuperscript{21} Ireland has been divided into two NUTS II regions, which are the Border, Midland and Western; South and Eastern. NUTS III regions includes: Dublin (e.g. Dublin city); Mid-East (e.g. Kildare); South East (e.g. Waterford); South-West (e.g. Cork) and Mid-West (e.g. Limerick)

\textsuperscript{22} National employment within the industrial sector rose by 46.1% during the same period.
indices of disposable income. Between 1996 and 2002 the South West fell from 96.7% to 95.2% of state level disposable income.

Cork’s economy developed around the growth of clusters, which have been prioritised by national and local policy makers and embedded in economic strategies, and in which foreign investors have been central. This strategy encourages corporate and academic facilities, venture capitalists and other interested parties to congregate together, fostering greater innovation and entrepreneurship. Cork has been especially successful in attracting foreign investment in the following sectors:

- **Pharmaceuticals and Healthcare**

  Ireland has the world’s third largest concentration of Pharmaceutical Companies – 13 out of the world’s top 15 are located here with companies such as Pfizer, Eli Lilly, Novartis, GlaxoSmithKline, Johnson & Johnson and Schering Plough all based in the Metropolitan Cork area.

  13 of the world’s top 25 Medical Device Companies are located in Ireland with companies such as Boston Scientific and Stryker based in the Metropolitan Cork area.

- **Information and Communication Technology**

  Cork is well represented in the world-wide computer technology industry. For example, internationally known companies, EMC Corporation and Apple Computers, both have major facilities close to the city which are of pivotal importance to their global operations. Within Ireland, 8 out of 10 of the world’s top Software Companies are located with Motorola having a major development centre in the Metropolitan Cork area.

- **Internationally Traded Services**

  The Internationally Traded Services sector, which includes activities such as contact centres, shared services and financial services, has grown considerably over the last number of years. Companies such as Avery Dennison, Black & Decker, Marriott, Starwood, RCI and Citco all have operations in the Metropolitan Cork area.

Cork’s attractions reflect a mixture of national and local factors. According to a study by PwC for ‘Strategic Cork’, investors target Metropolitan Cork for the following reasons:

- **Attractive Corporation Tax rates, currently 12.5%**
- **A new scheme of tax credits for Research and Development Activity**
- **A tax regime which encourages the establishment of Corporate Headquarters and Holding Companies**
- **Membership of EMU (Euro Zone) - the sole English-speaking member**
- **Extensive Business Support Systems**
- **Established Sectors of Excellence**
- **Excellent Infrastructure including an International Airport.**
Substantial Designated (tax efficient) Sites and a range of High Quality Property Solutions

Outstanding Natural Deepwater Port with Extensive Waterfront Access

Ireland’s second largest population base (257,000)

A Major Growth Centre

University City with 30,000 third level students

Large Resource of Skilled People and Highly Qualified Graduates

Exceptional Quality of Life

Interventions

Cork’s recent success should be recognised as a regional expansion which has built on the platform of national success – the Celtic Tiger. Some of the success factors are listed above but two key contextual points should be noted. First, Irish public policy since the end of the 1990s has operated on the basis of an explicit ‘social partnership’ model, which has involved a series of agreements between the state, business and unions about economic policy. Second, although Ireland has developed a sophisticated economic planning system, it is a highly centralised country in which sectoral planning has traditionally been much more important than territorial planning at the subnational scale. Local government is comparatively weak and regional government weaker still.

Economic development is dominated by the actions of two state agencies:

- **IDA Ireland** ([www.idaireland.com](http://www.idaireland.com))
  The Irish Government Agency responsible for inward investment. IDA Ireland has access to extensive data regarding all aspects of business in Ireland and is the first point of contact for most investors. It is recognised as one of the most successful inward investment agencies in the world.

- **Enterprise Ireland** ([www.enterprise-ireland.com](http://www.enterprise-ireland.com))
  Enterprise Ireland is mainly concerned with indigenous business. The agency is also responsible for inward investment in Ireland’s Food, Drink and Timber industries.

Recently, Ireland has adopted a National Spatial Strategy, which seeks to bring together sectoral and land-use planning objectives. The NSS provides a clear framework for regional and local development including:

- Setting out indicative policies in relation to the location of employment related and residential development, rural development, access to services and environmental quality to assist the framing of plans and strategies

- A framework that takes account of the various factors influencing the location of enterprise – the key driver of spatial patterns of development. The NSS outlines specific supportive measures that need to be considered, including the development of strategic reserves of land, access to streamlined planning processes where appropriate, improved capacity for innovation, research and
development, effective spatial and transportation frameworks and access to international markets.

- An outline of the spatial responses needed to maximise the potential of the tourism sector to support balanced regional development.
- Clear indication to local authorities as to where demand for the estimated 500,000 additional dwellings needed over the next ten years is likely to arise, particularly in strengthening gateways and hubs.

It is within this framework of national growth, and despite both a weak and complex system of regional governance, that Metropolitan Cork has shown regional leadership.

Ireland is divided into two regions for the purposes of EU Structural Funds: Borders, Midlands and West (BMW) and Southern and Eastern. These regions are overseen by regional assemblies comprising appointed representatives. In addition, there are eight regional authorities with some planning responsibilities. Cork falls under the ambit of the South West Regional Authority (based in Cork). At the local level, the county and local authorities (namely Cork County Council and Cork City Council) are important if relatively weak players. In addition to the local authorities other actors include Cork County Enterprise Board and Cork City Enterprise Board Cork. The City Council has taken a leadership role in two respects. First, it initiated (with Cork County Council) the Cork Area Strategic Plan in 2001; second, it is the leading player in ‘Strategic Cork’, which promotes the development of ‘metropolitan’ Cork.

As the country’s second largest city, Cork now enjoys special status under Ireland’s National Spatial Strategy (NSS). Cork is designated a Gateway City under the NSS: a centre for national strategic growth with the industry and infrastructure to sustain development and generate investment. This designation paralleled the region’s own Strategic Plan (CASP - Cork Area Strategic Plan) which addresses land use and infrastructure requirements in the greater Cork City area - known as Metropolitan Cork. Prepared jointly by the City and the County Council, CASP sets out a detailed development path up to the year 2020. It deals extensively with infrastructure projects but CASP is also concerned with stimulating investment, maintaining educational standards and with the preservation of the area’s natural and cultural heritage. In addition, CASP proposes a wide variety of initiatives to build upon Cork City’s economic success stories. In this respect, the plan identifies a number of key economic themes.

Its strategy can be summarised as developing infrastructure and human capital to maintain the flow of FDI in high value activities, and which will contribute to the emergence of Cork and the South West region as a knowledge economy. Metropolitan Cork sees its future as a centre for innovation and creativity and the seeding process has already begun at world class facilities such as the National Microelectronics Research Centre (NMRC) and throughout the city’s designated Knowledge Zone.

Cork City’s Knowledge Zone initiative enables companies to locate close to the city’s seats of learning so they can share knowledge with researchers and other academics - removing formal barriers to the flow of ideas and innovation. The National Microelectronics Research Centre (NMRC) is a semi-autonomous ICT research institute within University College Cork (UCC) and which currently employs more than 250 staff and postgraduate students. Its Industry Advisory Board comprises senior executives from the ICT industry and government agencies, as well as the UCC.
President. NMRC is currently involved in a significant number of major research projects at both a national and international level, involving a variety of funding sources including industry. The clients of NMRC also include the European Space Agency who have established their Microelectronics Technology Support Laboratory (MTSL) at NMRC and which provides a valuable service to their Components Division.

Correspondingly, ‘Strategic Cork’ was a principle actor behind the promotion of Cork as European Capital of Culture 2005. Unlike in the UK, there was no national competition for this title. A strategic decision by the Irish was taken to nominate Cork in support of its ambitions to be recognised internationally as a city of knowledge and creativity.

Overall, the South West (Counties Cork and Kerry) are expected to contribute to balanced regional development through acting as a national/international gateway, supported by the Mallow hub at a pivotal location between Cork and Limerick. Cork will build on its substantial and established economic base to lever investment into the South West region. It will do this with the support of its scale of population, its third level institutions (for example, local level Development Boards which prepare Integrated Strategies for Economic, Social and Cultural Development) and the substantial capacity for growth identified in the Cork Area Strategic Plan (CASP). Successful implementation of CASP is recognised as important to secure the objectives of the NSS and appropriate implementation structures supported by the local authorities and State agencies will be put in place to deliver the strategic plan.

Lessons for the North East

Ireland in general provides an example of a successful strategy upgrading FDI around R&D and knowledge-based projects. Low corporation tax rates remain an important pull factor, but other important elements include:

- Focusing on business sectors that are closely matched with the emerging needs of the economy and that can operate competitively in global markets from an Irish base.
- Detailed research and foresight into the Irish economy.
- Building links between international businesses and third level education and research centres to ensure the necessary skills and research and capabilities are in place.
- Building clusters of knowledge-based activities.
- The development of infrastructure and business support services, telecoms, education, regulatory issues especially in relation to EU policy.

Cork has successfully captured a share of the growth of the Celtic Tiger, through successful — if loosely structured — partnership working despite the highly centralised nature of the Irish state.

The NSS process, together with CASP in the Cork region, represents a further development of an economic planning system based on strong central directives and loosely institutionalised local partnerships. The North East may be able to learn more lessons from this context — concerning the emergence of an FDI-based knowledge economy than from regions with strong political institutions and autonomy.
References:


IDA Ireland (www.idaireland.com)

Enterprise Ireland (www.enterprise-ireland.com)

FORFAS (www.forfas.ie)

Cork City Council (http://www.corkcity.ie/)

Cork Area Strategic Plan (http://www.corkcity.ie/)

Cork County Council (http://www.corkcoco.ie/)
Vastra Gotaland, Western Sweden

| Population: 1,507,182 (of which 474,298 live in the city of Goteburg) |
| GDP ('v national): 229,000 SEK per head; (99 per cent of Swedish average) 2004 |
| Employment rate ('v national): 73.4% |
| Unemployment rate ('v national): 4.1% (2005) |
| Sectoral structure: Västra Götaland % of GDP: 0.5% primary; 18% manufacturing; 81.5% tertiary.(2003). |

Economic history

The Region of Västra Götaland comprises 49 municipalities, including Sweden's second-largest city, Göteborg (Gothenburg) and has more than 1.5 million inhabitants, or about 17% of the national population. The City of Göteborg accounts for close to one-third of the region's population. Göteborg is home to the largest port in Scandinavia, and the second-largest airport in Sweden, making the city and the region important transport hubs. Göteborg is also one of Sweden's most important research centres, with large, reputable universities, and there are also university colleges in some of the region's smaller cities.

The region’s growth in the 20th century was centred on the expansion of shipbuilding. The region contained a large part of Sweden's capacity in the sector at the time Sweden rose to prominence as a shipbuilding nation. The first shipyard closures in the region occurred in the 1970s and continued during the 1980s. Only one ship repair facility survives in Göteborg. The decline in shipbuilding was offset by the growth in new industries, notably cars during the 1960s and 1970s. The Volvo car company was established in Göteborg in 1927 and Saab opened its first factory in Tröllhatten in 1947. Other important industries which developed in the post-war period included petrochemicals, especially at Stenungsund. Thus, Västra Götaland can be considered an (old) industrial region, although one which has experienced a relatively successful restructuring in recent times, involving a shift to new knowledge-based industries (see below).

Västra Götaland is a relatively new political construction. The Västra Götaland Region is part of an official regional governance pilot in Sweden that has allowed two regions to be formed by the merger of a number of county councils. These are the Västra Götaland Region, which has Göteborg (Gothenburg) as its main urban centre, and Region Skåne, with Malmö as its main urban centre. In these two regions, directly elected regional bodies have taken over responsibility for regional development from the County Administrative Boards which are the state bodies at the regional level and perform a role not dissimilar to Government Offices in the Regions in the UK. The pilot trials are currently running until 2010. The regional administrative and democratic structure in Sweden is therefore asymmetrical.
The Västra Götaland Region was formed in 1999 by merging three former county councils and including parts of Göteborg’s decision-making functions, mainly those concerned with health care. With time, the former historic county borders became an obstacle to mutual interests in fields like public transport and catchment areas for health care. The Region has responsibility for two main tasks: health care and regional development. Every fourth year, the citizens elect representatives for the regional council, which is the highest decision-making body.

**Recent economic change**

During the last 10 years, the Västra Götaland Region has become one of the fastest growing regions in Sweden (see Figure 3.1). Fifty percent of all new jobs created in Sweden between 2000 and 2004 were in the Västra Götaland Region. In 2003-2004, the region increased its business start up rate by over 25%.

**Figure 3.1: Growth in Employment, Swedish regions, 1993-2003**

The growth in employment reflects a significant transformation in the economic base of the region; manufacturing employment is almost 75% of that in 1990 but has been replaced by a growth in service jobs (see figure 3.2).
In 2003, Västra Götaland's share of manufacturing employment (22%) was slightly higher than the national average. Main industries include the automotive industry, shipping, petrochemicals, pharmaceuticals, and food. The region is particularly dependant on the automotive sector, through Ford Motor Co., owner of Volvo Cars, which employs about 1.5% of the workforce, General Motors Corp., owner of Saab Automobile, which employs about 1.0%, and heavy truck manufacturer Volvo, which employs less than 1.0% of the region's workforce. The automotive industry also provides work for many small subcontractors in the region. Continued restructuring within the global automotive industry is of concern to the region.

Västra Götaland's economy has experienced a transformation with a shift from domination by traditional engineering made up of many small companies to a region led by R&D in sectors such as IT and biotechnology. Sectors that have traditionally been under-represented compared to Sweden as a whole, such as education and research, and financial and business services, have grown in recent years. The region's unemployment rate has evolved largely in line with national trends; at 4.1% in 2005 it was similar to the national average and reflected a period of stability whereby regional economic cycles have begun to match the national pattern.

Västra Götaland generates close to 17% of Sweden's GDP. The region's per-capita GDP was 99% of the national average in 2004 (see Figure 3.3), corresponding to about 119% of the EU average. Over the past decade, Västra Götaland's population has increased by 3.8%, slightly above the national average of 3.4%, and the positive growth trend is expected to continue. As in most areas of Sweden, immigration is the predominant driver of population growth, but natural growth is also positive.
In summary, Väst Gothenburg has successfully restructured its industrial base and, in 2004, was ranked fifth in the world on a Competitiveness Index (Robert Huggins Associates, 2004).

Interventions

The main regional policy instrument is the system of Regional Growth Agreements, not dissimilar to Regional Economic Strategies in the UK. The Swedish Government initiated a process for regional growth agreements in 1997. The Government stated that agreements on regional growth (SE 14) were intended to become the principal instrument for coordinating and adjusting the policies of the various sectors, and also for exploring new approaches to the promotion of regional and local industrial development. Thus, these agreements were to be the principal tool for the implementation of the new regional industrial policy. The first regional growth agreements were launched on 15 March 2000, when the first generation of such agreements were signed between 21 counties and the Swedish Government.

Innovation policy is a major component in the regions’ growth strategies. To a substantial degree policy focuses on RTD activities, technology diffusion institutions and venture capital markets. These regional growth strategies are generally geared towards the specific industrial specialisation in the regions, but drawing from the analytical approaches of innovation systems or cluster approaches. Additionally, in September 2000 a parliamentary commission on regional policy stressed the importance of inter-firm co-operation, entrepreneurship and new technology as vital factors for economic growth and recognised the important potential of universities for regional growth.

The Ministry of Industry, Employment and Communications makes annual evaluations of both the process and the impact of the RGAs and these emphasise the similarities across RGAs. The first evaluation report stated that the RGAs had increased awareness of the importance of the regional and local economic environment to the
competitiveness of enterprises. Networks and clusters had gained much attention and cluster policies were increasingly taking shape in the regional context, while public agencies in the regions stated that the coordination and visibility of resources for the purposes of regional development had improved with the RGAs.

While RGAs have improved coordination at the regional level, national sectoral coordination remains weak. The need for clearer commissions and guidelines for these actors is identified as a prerequisite for the further development of the process. Important shortcomings in the RGA process were noted as being the low level of private sector involvement and insufficient knowledge and recognition of the basic RGA ideas as an instrument for regional development, including the potential benefits to the actors concerned. Another problem was the unclear mandate of the partnerships.

The second evaluation of the Regional Growth Agreements was published in June 2002; with results in line with those flagged in the first round evaluations. A further need for a bottom-up approach was emphasised to increase the local influence and involvement of private companies. The interest in, and knowledge about, environmental issues had increased, but gender differentials remained an underdeveloped issue.

Regional Growth Agreements are framed within the regional policy bill ‘A Policy for Growth and viability throughout Sweden’ 2001/2002:4 which focused on the establishment of a new policy area – regional development policy — and has some similarities in its underlying principles to PSA2 in the UK. The purpose has been to establish a well-coordinated policy for all parts of the country; in other words to create regions with local labour markets that function well and are sustainable, with good services. The Government has argued that proactive strategies are needed to reach this objective, including (a) efforts within areas where investments have great importance for regional development, and (b) a clear division of responsibility between the Government and municipalities. The latter means that municipal co-operation bodies could be established in all counties from the year 2003 (so have they?) These bodies would have the authority to decide about county plans for regional infrastructure and also take decisions on certain governmental funds for regional development.

One task of these bodies is to create programmes for development of the county, for example regional growth programmes. The regional growth agreements will develop into regional growth programmes in 2004. Such programmes should consist of analysis, goal and regional priorities and a plan for financing, implementation and evaluation. The third evaluation of RGAs is cognisant of this shift in emphasis arguing that the transformation to growth programmes is judged to have further strengthened co-operation but also the need to further focus and delimit future growth programmes. The programmes will build on the previous successful establishment of a learning system in the regions and co-operation between regional sectoral representatives according to the evaluation.

Västra Götaland is regarded as a forerunner when it comes to the integration of economic, social and environmental perspectives in the regional growth agreements. The evaluation of the regional growth agreements from 2002 states that the region ‘has adopted a broad perspective and in an integrated way analysed and developed its knowledge of sustainable growth on a regional basis’. The region of Västra Götaland was formed in 1999 and established a regional development strategy (RUS), defining
the long-term visions and goals for regional development in Västra Götaland. The RUS is seen as the platform for the growth agreement and other efforts that strengthen the region as an attractive place to live and work in.

The region must act with other agencies to deliver its objectives. The four principal national agencies concerned with regional development are NUTEK (The Swedish Agency for Economic and Regional Growth); VINNOVA (Agency for Innovation Systems); ITPS (The Swedish Institute for Growth Policy Studies) and Invest in Sweden. Each of these agencies has the promotion of regional development as a core objective and is involved in policy development and evaluation in this field. Thus, despite the creation of the Västra Götaland regional government, rather like in the UK, the regional development field in Sweden is a crowded one, with well documented problems of coordination and integration. Nevertheless, the recent economic performance of Västra Götaland suggests that actions by regional (and national) agencies have helped the region shed its ‘old industrial region’ label and have contributed to the emergence of the region as ‘learning region’ in the European context.

At the heart of the interventions has been the conscious effort to build a knowledge economy in Västra Götaland. Swedish regional policy has a strong orientation to the development of regional innovation systems. VINNOVA’s approach to this objective is founded on the Triple Helix model, which places a premium on promoting links between universities, the public sector and business in an effort to build the knowledge economy (Figure 3.4).

**Figure 3.4: The Triple Helix Model of Development in Sweden**

Source: VINNOVA

Reflecting this model, Göteborg is home to several specialized, world class science parks (see Box 1), which underpin its performance as one of Sweden’s leading centres for R&D, while Sweden itself is regularly ranked top in Europe for R&D intensity.
Box 1: Science Parks in Göteborg

Chalmers Technology Park: R&D centres for established companies
Chalmers Innovation: Pure incubator for high-tech companies
Lindholmen Science Park: specialises in IT and Telecom
Sahlgrenska Science Park: specialises in Biomedical Companies

Lessons for the North East

Västra Götaland provides an example of a region which has charted a successful transition from traditional industries to a knowledge-based economy. In this context Västra Götaland can point to an exceptional performance in R&D and the growth of new-technology based firms in recent years. The application of the triple helix model, linked to the performance of science parks in Göteborg, appears to be a genuine success story in a field marked by exaggeration and hype.

Although a pilot region regarding the Swedish devolution reforms, the regional government remains a relatively weak actor and must develop its strategies with other actors including municipalities and state agencies. Key to these strategies are the Regional Growth Agreements.

The Swedish Agency for Public Management is undertaking research on how countries ‘join-up’ resources for regional economic development, with a special focus on budgetary systems and the use of monitoring and evaluation to encourage collaboration. This work involves a UK case study and provides a concrete opportunity to share experience and lessons about ‘what works’.

The Göteborg experience looks especially relevant when thinking about the current plans in the North East for Science City/Science Central.
Navarre, Spain

Population: 593,472; Spain 44,208,530 (2005)
GDP (‘v’ national): €14,3275 millions, 1.7% of Spanish GDP (2005)
Unemployment rate (‘v’ national): 5.95%, Spain 8.70%.
Sectoral Structure: (primary, secondary, tertiary)
Employment: 4.4%, 24.3% (construction 10.8%), 60.5%;
GVA: 3.4%, 29.3% (construction 9.8%), 57.5%
R&D - % of employment (‘v’ national);
expenditure: €256,947 thousands (Spain €8,945,761 thousands);
%GDP (base 1995): 1.90 (Spain 1.12)
employment total: 4,040 (Spain 161,932.6)
employed in research per thousand: 15.49; (Spain 9.01);

Economic History

Navarre is a small region in the North-West of Spain that contributes 1.7% of the national GDP. It has a relatively low density population clustered around small rural towns and the capital city, Pamplona. Like the neighbouring regions of Aragon and La Rioja (the so called Axis of the Ebro River Valley) the region has been late to industrialise and was, until the 1950s, a predominantly agricultural region. In the last few decades Navarre has experienced a rapid and successful industrialization process and is now one of the richest regions in Spain in terms of income per capita and quality of life.

In 1964, Navarre had an agriculturally based economy with 41% of the jobs in this sector. As the Francoist government promoted a very strong industrialization policy aimed at modernizing Spain and opening it up to market forces so national and regional governments strongly promoted the location of industry in Navarre around several so-called “development poles”. One consequence was the establishment of the car manufacturer SEAT in 1966. Today, Navarre is particularly specialised in manufacturing and the food industry in recent years the Regional Government has actively promoted an innovation regional policy.

Sanz-Magallon Rezusta (1999) identifies 3 reasons to explain the region’s success:

- Geographical location: The Valley of the Ebro River, where Navarre is located, crucially connects the Basque Country with Catalonia, the cradles of the industrialization process in Spain in the second part of the 19th Century. The region has functioned as a connector and supplier to the growing market in
these areas and is also part of the axis that connects Europe to the growth pole of Madrid.

- **Fiscal autonomy**: Navarre, together with the Basque Country, enjoys a high degree of political and policy autonomy including tax raising powers and subsequent expenditure. Similarly, Navarre has regional powers over spatial planning and economic development, including science and technology.

- **Human capital**: Since the 1960s the level of education of the population in Navarre has increased significantly and is today one of the highest in Spain.

The economy in Navarre does still have some weaknesses, mainly the poor rail connections with France and the rest of the peninsula and the small and fragmented character of much of the agricultural and industrial base.

**Recent Economic Change**

In the last decade Navarre has continued to be one of the most dynamic regions in Spain.

The industrial sector still plays a mayor role in the economy employing 24% of the population and contributing 29% of the GVA, well above the average in Spain (see Figure 3.5). The automobile sector, which in 2002 employed 11,000 workers (4.8% of the workers in Navarre) is dominated by Volkswagen which took over SEAT’s factory in 1982. The factory employs directly or indirectly about 7,100 people. Agriculture is a traditional sector in Navarre but it has high productivity rates, is dynamic and market oriented, and forms the base of a successful agrofood industry (Rodriguez-Pose, 2000).

**Figure 3.5: Evolution of Employment Structure in Navarre in relation to Spain (Spain=100)**

![Graph showing the evolution of employment structure in Navarre](image)

Source: Sanz-Magallon Rezusta, 1999

Unlike other highly industrialised regions in Spain (notably the Basque Country and Asturias), Navarre has not suffered a deindustrialization process, high unemployment...
nor depopulation in the 1980s. In fact, population has continued to grow above the Spanish average.

In 2005, Navarre was the 3rd ranked Spanish region in terms of GDP per capita, only behind Madrid and the Basque Country, both of which are much bigger regions. Navarre’s GDP per capita has consistently been above the Spanish average since the 1990s and, in fact, has increased the gap since 2000 (Figure 3.6). In European terms Navarre has also been above the EU average in the last decade and in 2002 its relative GDP index was 107 in EU=15 and 119.6 in EU=25.

**Figure 3.6: GDP per capita in Navarre and Spain**

![GDP per capita in Navarre and Spain](source: INE. Instituto Nacional de Estadística)

Composition of GDP by sectors in 2005 in Navarre is similar to the neighbouring regions of Aragon and La Rioja and is characterised by the greater presence of industry and agriculture than on average in Spain and the EU.

In 2005, total regional employment stood at 329,800 jobs. In 2003, 18,800 jobs were in agriculture, 1,200 energy, 38,000 construction, 78,000 manufacturing and 172,000 services. Employment has grown consistently in the last decade (see Figure 3.7) particularly in services and industry but agriculture has maintained its employment levels.

**Figure 3.7: Growth in Employment by Sector, Navarre region**

![Growth in employment by sector](source: Figure 4: Growth in employment by sector)
Unemployment has significantly decreased both in Spain and Navarre in the last 15 years but has increased slightly in the last 5 years particularly in Navarre (Figure 3.8). This increase has run in parallel with an increase in employment activity rates due in part to the incorporation of female workers in to the labour force. Recent work suggests an unemployment concentration within the industrial sector which, in turn, is partly attributable to the decline in the annual production of cars.

**Figure 3.8: Unemployment rate in Spain and Navarre**

![Unemployment rate chart](image)

The most recent economic change has been a move towards more technology based production, both in manufacturing and the food industry, alongside the emergence of new sectors like bioindustry or sustainable energies. Navarre has in the last few years developed a policy towards technological upgrading of its economic infrastructure. The regional government and firms in Navarre have consistently increased investment in R&D at a higher rate than the Spanish average and Catalonia, one of the richest and most advanced regions in Spain (Figure 3.9). Starting from a lower level of investment, Navarre is now the first region in Spain in terms of expenditure, dedicating 1.9% of its regional GDP to R&D.

**Figure 3.9: % GDP expenditure on R&D**

![GDP expenditure chart](image)
Investment in R&D can be further broken down into a range of indicators (see Figure 3.10). Employment in R&D has grown and, by 2001, almost half of the regions’ R&D staff were employed in the private sector. Nevertheless, it rates as 85th and 95th respectively amongst European regions in terms of expenditure in R&D in relation to GDP and patents in high technology (Zabala, 2004). The European Commission has calculated a composite index for regional innovation where Navarre scores 130 in national terms (Spain=100) but drops to 80 in European terms (EU15=100) (Ibid.).

**Figure 3.10: Investment in R&D in Navarre**

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<tr>
<td>Total Expenditure in R&amp;D</td>
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<td>76407</td>
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<td>94595</td>
<td>114065</td>
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<td>1880</td>
<td>2136</td>
<td>2063</td>
<td>2557</td>
</tr>
<tr>
<td>R&amp;D staff/ total active population</td>
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<td>8.3</td>
<td>9.5</td>
<td>9.3</td>
<td>10.8</td>
</tr>
<tr>
<td>R&amp;D staff in private firms/total R&amp;D staff</td>
<td>39.47</td>
<td>35.59</td>
<td>43.59</td>
<td>35.77</td>
<td>49.16</td>
</tr>
</tbody>
</table>

Adapted from Zabala, 2003
Interventions

The institutional context in Navarre is dominated by the strong presence of the Regional Government. SODENA is the Regional Business Development Agency, founded in 1984 and mainly funded by regional government and the regional Savings Bank. It actively participates in business projects and its main tool has been the provision of venture capital. Another key institutional actor is ANAIN, Navarre’s Innovation Agency created by the regional government to manage in an integrative manner the Navarre Technology Plan.

The Navarre Technology Plan was first approved in 1999 for 2000-2003 and is now in its second edition (2004-2007). The general objectives of both plans are to improve the competitiveness of firms and promote employment through a quantitative and qualitative rise in technological activity (Gobierno de Navarre, 2003). The main sectors to have benefited from the Technology Plan have been transport materials, machinery and mechanical equipment, metals and the food industry, which account for most of regional GVA. In the 2000-2003 period, several innovative projects can be highlighted: improvement of the quality and conservation process in the food industry (particularly the conservation of vegetables), specific innovations in the automobile sectors which has trickled down the supplier’s chain, renewable energies and logistics (Zabala, 2003).

The first plan was meant to have a big impact and was more quantitative focusing on mainstreaming R&D activities in as many firms as possible and developing a technological infrastructure that could deliver services across sectors and activities. This included the creation of 10 Technology Centres in Navarre. Two of these Centres are cross-sectoral and eight sectoral, mainly around food industry but also the car industry, renewable energies and applied medicine. These centres provide advice and consultancy on how to incorporate technology in production. The underlying logic is that the relatively small size of firms in Navarre will not leave them enough capacity to innovate without concerted support.

The second plan focuses on quality and is directed towards the consolidation of sporadic technological activities in firms and the facilitation of the development of long-term strategies and the strengthening of the relationship between firms and technological agents (Gobierno de Navarre, 2006). The second plan has seen an increase of 17% in investment but perhaps more significantly a bigger increase in training activities that would foster an innovation culture. The Plan has, for example, created self-guide protocols for businesses to test their level of innovation. It also organises courses and events for the firms to meet and exchange best practices. In the Technology Centres, the 2nd Plan is investing in the training of staff. The 2nd Plan has also drawn more significantly on stakeholders and it maintains several “round tables” for discussion and consultation.

In 2000-2003 the regional Government invested €83m in grants for the implementation of technological projects in firms. It is estimated that for every Euro invested this levered in €3.5 of private investment in the 2000-2003 period. In 2004-2005 the Government has invested €33.8m which, in turn, has levered in €222.6m investment by private firms (a ratio of 1:6.5). In 2004 and 2005 the second Technology Plan has approved 325 R&D projects.
Regional universities are crucial innovative actors. Buesa et al (2002) identify Navarre as one of the most important Regional Innovation Systems in Spain and which stands out in its university research capacity. The University of Navarre, a private institution, was established in 1952 and has been historically linked to the local territory particularly in the area of medicine, and is considered one of the best in Spain. This University has been the main innovative agent apart from the private businesses through its main research institutes around Applied Biology and Biomedics. The Public University of Navarre is a younger actor and not that dynamic.

Some of the weaknesses of the Regional Innovation System are the fragmented nature of the firms and the relatively low presence of firms in emerging sectors. The regional Government has in the last years been actively promoting biotechnology and is marketing Navarre as a Bioregion. This new area hopes to build up on existing skills around Medicine and Food industry but it is still not prominent.

Examples of projects

Navarre has a high presence of foreign and multinational firms and in some cases this has proved beneficial in terms of technological advances. One interesting example is the Aranzadi Publishers, a small to medium-sized firm in the printing/editing sector which specialises in legal information. It was founded in 1929 by a local lawyer. In 1999 the company was bought by an American firm called Thompson Corporation whose star product internationally was the online sales of legal products, which at the time represented only 2% of the sales of Aranzadi in Spain. The company successfully managed to incorporate the new technology and is now a leader in the online sales of juridical products. Importantly it managed to undergo this significant technological transformation with little change in personnel (Biurrun Abad, 2002). Several elements related to the Regional Innovation System can explain this story:

- Before the company’s buy-out, Aranzadi had already developed innovations like the digitalisation and linking up of documents.
- Workers who were displaced by automation were relocated in other areas within the firm. Thus, even though the production department had a 45% personnel reduction, overall there was a 20% increase in personnel in 1989-1998 (Simon et al, 1999).
- The company has trained its employees and most of the staff have university degrees so the introduction of the internet and digital technology could be absorbed.
- There are good links with Universities and Aranzadi has established collaboration contracts with various Spanish Universities to train students to use its technology. It also offers general training courses.
- The company actively develops links with professionals and has, for example, established a prize for research on jurisprudence and the internet.
Lessons

Navarre has successfully industrialised within the late 20th Century and adapted to the challenges of the knowledge economy through a process of technological upgrading of the economic infrastructure of the region. Lessons to be drawn would include:

- It is crucial to have very visible regional government actors that act as the main gateway, not competing government levels.
- In terms of innovation Navarre has designed a relatively simple and visible strategy. There are not many initiatives but one technology plan and a technological infrastructure formed by a network of research centres focused on the most relevant sectors in the region.
- It is important to have a fluid relationship between regional government and regional firms based on trust.
- A highly educated population can adapt easier to changes in technology and results in less unemployment or redundancies.
- Investment in technology does not necessarily need to focus in emerging areas like biotechnology but can also build on traditional sectors where the region has an important skills stock. In turn, such investment can activate innovation within existing supply chains and inter-sectoral links.
- Links with Universities have been a crucial part of the innovative fabric of the region. In Navarre the smaller and more elite university has been more successful in developing links with the private sector, but the public university plays a relevant role in educating the general population.

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Navarra Chamber of Commerce: http://www.camaranavarra.com/
Norte, Portugal

**Population:** 3,727,310 (35.4% of Portugal) (2004)

**GDP (‘v’ national):** Norte Nominal GDP €36,557m; 28% of Portugal total (2003); GDP per capita pps (EU 100) Norte 61.5; Portugal 76.8 (2002)

**Employment rate (‘v’ national):** Norte 52%; Portugal 52.5% (2004)

**Unemployment rate (‘v’ national):** Norte 7.7%; Portugal 6.7% (2004)

**Business stock (‘v’ national):** Number of enterprises: Norte 207,571; Portugal 639,106 (2003); Number of business establishments per 1000 population: Norte 55.9; Portugal 61.0 (2003)

**Sectoral Structure:** Norte % of GVA: 2.7 primary, 35.3 secondary, 62.1 tertiary (2003)

**R&D - % of employment (‘v’ national):** Norte 11,323 total (25.7% of Portugal total) (0.6% of region active population) (2003)

**R&D expenditure (‘v’ national):** Norte €246.4 m (24.2% of Portugal total) (2003)

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**Economic History**

Norte, by population, is the largest region in Portugal and is the nation’s leading region for exports. The region can be divided into three economic sub-regions: the north-coastal metropolitan area; Minho-Lima sub-region located between Porto and Galicia (Spain); and the interior sub-region Douro and Tras-os-Montes.

Oporto is the main metropolitan area within the region centred on Porto city. The city is the centre for advanced services, a small amount of public sector employment and the hub for transport and communication infrastructures (airport, port, railways, motorways, ICT.). In the surroundings of Porto Metropolitan Area, the urban structure is more diffuse in accordance with an industrial district economy with a strong export dynamic. Norte region accounts for 40% of Portuguese exports, principally in traditional sectors, such as textiles and clothing, footwear, furniture, cork and wood products.

The other two areas have been important rural economies, especially in Douro and Tras-os-Montes, where quality agricultural products are produced, such as wine and olive oil. During the post-war period, the rural interior of the region registered a strong out-migration flow, namely to Lisbon and Europe (especially France) and today population continues to decline. The ageing population and the strong dependence on public transfers are critical issues for the sub-region although construction and tourism activities are growing.
Following Portugal’s entry in to the EU (and the Structural Funds that followed), the Norte region performed well with strong economic growth rates, inward investment in new sectors such as automobiles and electronics, and job creation. The recent enlargement of the EU combined with the liberalization of trade in sectors with a strong presence in the region, namely textiles and clothing, is, however, providing a major economic challenge to the region. In the last 5 years, the region has suffered strong competition from Asian countries and Eastern European economies leading to severe industrial decline, production delocalization, and unemployment growth.

**Recent Economic Change**

Overall, GDP growth in the Norte region in 1995-2003 was similar to that experienced for the EU 25. In the same period, Norte’s share of national GDP declined marginally from 31% to 30%. There was an increase of 8% in total employment in the region, although employment growth was stronger at national level in the period 1995-2003 (11%). Since 2000, employment growth has stabilized and eventually diminished, as a result of industrial delocalization of foreign owned branch plants in traditional sectors (Figure 3.11). It is estimated that around 70,000 jobs have been lost across these sectors.

Consequently, manufacturing’s contribution to GDP has diminished from 29% to 25% during the period and service sector employment now accounts for half of total employment (49.5%). Due to Norte’s key position within national exports, the downturn within traditional manufacturing has had a strong impact on the national economy, including partially explaining the recent divergence of growth of the Portuguese economy from the EU average.

**Figure 3.11: Total employment, Norte, 1995-2003**

A major problem for the region is low productivity; productivity levels are calculated at about 50% of the EU average in 2001 and 83% of national productivity levels. These
levels are explained by the weight of traditional industries (textile/clothing, footwear, etc.) in the regional economy and their historical dependency on low labour costs.

In terms of R&D expenditure, Norte region is slightly below the Portugal average in 2001 (0.61 % of GDP versus 0.85% GDP in Portugal; Figure 3.12). Nevertheless, the Porto urban region is the second largest concentration of R&D infrastructures and human resources in Portugal. The universities of Porto and Minho, technological centres, and some relevant national firms in science based sectors are the backbone of R&D activities in the region.

Figure 3.12: R&D Expenditure breakdown by Portuguese Regions (NUTS II), 1999

(10^6 Esc = 49,964.5)

Source: OCT (2002)

Interventions

Recognising that the restructuring process is not yet completed, the region is seeking to upgrade traditional value chains, develop new knowledge economy activities and to increase cross-border collaboration between Norte and Galicia (Spain) to capture investment and to develop new infrastructure in these peripheral regions of Europe.

The lack of a regional administrative level or a strong regional coordination body has been perceived as the major problem for the economic development of the region, which is reflected in poor spatial planning of the region, the lack of key regional projects (for example, logistics) and in the atomization of projects in the interior of the region.
One example would be general agreement on the lost opportunity of Porto 2001 European Capital of Culture. The initiative contributed little to the region’s development and has been considered as a lost opportunity for regional promotion in Europe.

Recently, the region has supported the creation of a Centre for Excellence in the Automobile Industry that intends to reinforce the collaboration with the automobile cluster of the Spanish region of Galicia. This initiative may be the best chance to diversify the economic regional base, and to attract new industrial and service firms and establish stronger cooperation with R&D infrastructure. Other emergent developments in the region’s high technology sector in the region are centred on the biotechnology and life sciences; the University of Porto and a large biomedical firm have been crucial in supporting other start-ups in the region that are targeting world markets.

In the 2000-2006 Community Support Framework, the Norte Regional Operational Programme in 2000-2006 has a € 4,910 m budget, of which € 2,865 m are Structural Funds (www.qca.pt). The Operational Programme promotes the region and particularly Porto city, since the city is one of the largest three in the Northwest of Iberian Peninsula (Vigo and A Coruna in Spain and Porto in Portugal). The Galicia and Norte euro-region has an area of 50.8 thousand Km² and around 6,500 inhabitants. The critical mass of these two regions has some potential to attract new investments and human resources in an increasing Iberian urban system. The Operational Programme also articulates other policy areas, such as support to critical areas in the region as well as basic infrastructure developments.

The National Spatial Strategy is another key instrument to promote regional development in articulation with land-use planning objectives. Although the Portuguese NSS is in the public discussion phase, it clearly intends to reinforce Porto’s connection with Galicia, namely through the introduction of a High Speed Train from Porto to Vigo. The NSS envisages the promotion of polycentric urban development with a more balanced and complementary distribution of infrastructure. The environmental problems of a diffuse industrialized system are also of policy concern. Thus the improvement of industrial areas is seen as a fundamental step to attract inward investment and new activities in the knowledge economy with strong linkages with the R&D system of the region. Nature, culture and heritage are seen as key strategic resources to tourism development in the region. The Douro Valley is to become an important quality product within tourism activity.

The Technological National Plan is a major policy instrument for the Portuguese authorities. The plan is aiming at both national and regional technological development and initiatives. In the Norte region, the ICT and electronics sector has been relatively important although in some less advanced market segments, and greater expectations have been put forward in the life sciences activities (health, medical equipments and pharmaceuticals and biotechnologies), since the region has some leading research institutions and firms as well as succeed small firms (in some cases spin-offs from research institutions). Nevertheless, technology transfer processes are not well established in the regions and this is a major concern of regional technology policy. In contrast, firm formation rates are extremely high in the region and reflect the region’s entrepreneurial culture.

The important role of traditional industries in the region’s economic base is a key policy domain addressed by different instruments; for example, the Dinamo Programme is
aimed at upgrading the value chain in the textile, clothing and footwear activities. Fashion and design are seen as critical functions to be developed in the region to support these firms along with the monitoring of market and collective consumption trends and better control of distribution circuits.

The CCDR regional body is preparing the next Norte Operational Programme (2007-2013) to be partially funded by Structural Funds under the Objective 1 of European Regional Policy. The strategic priorities are the described below:

- **I NORTE ITEC** – to promote the technological development of the regional economic base in traditional and emergent sectors.
  Policy actions will address tertiary education development in ICT and biotechnologies; technology transfer university-firms; support to export activity by firms in new sectors; attraction of inward investment (grants) in identified sectors; support to high-technology firm creation and financial schemes (risk capital, business angels, etc.); creation of a science and technological infrastructure regional network.

- **II NORTE SCORE** – to improve the regions competitiveness.
  Policy actions will aim to reduce transaction costs in the urban areas and support positive externalities of industrial agglomerations. Telecommunications, logistics, environment infrastructures and urban regenerations are targeted policy areas.

- **III NORTE EQUALITY** – to promote the social and territorial inclusion.
  Policy actions intend to improve equal opportunities and a better access of all citizens to social and public equipments and services as well as directing support to unemployed in the region.

### Lessons for the North East

The Norte region has yet to overcome the serious problems of rural depopulation and growing social exclusion in certain urban and suburban areas (namely council housing areas). Nevertheless, Porto is the second largest city in the country and the region has noticeable an entrepreneurial dynamic hard to find elsewhere, even though this is found in traditional activities heavily dependent on low labour costs. Policy answers to promote the region's development are addressing the economic base but at the same time incorporating concerns about social and territorial cohesion. The first lesson of the Norte region case study is the joint articulation of competitiveness, social and environmental concerns at at policy level.

The second lesson is the cross-border collaboration of Norte-Galicia. New infrastructure development in the euro-region and the effects of critical mass may support a more ambitious policy to attract new investments and skilled labour to the region.

A third lesson is related to policy discrimination towards more technologically intensive activities (ICT and biotechnology) in the region, but starting from business sectors that are closely matched with regional assets and can operate competitively in global
markets. This strategy involves regional research institutions and universities to ensure the necessary skills for the development of emergent sectors.

The fourth lesson is clear policy concerns with traditional activities in the transition period to a knowledge economy. The upgrading of value chains may well support regional development even though employment destruction is difficult to reverse and labour market integration of former workers is hard to achieve.

The fifth and final lesson is derived from the articulation of different levels of governance. The European Union and the national government are extremely powerful in the shaping of regional futures in Portugal since there are no autonomous regional authorities in the Portuguese mainland (the exceptions are Azores and Madeira). The National Technological Plan articulates all other economic development instruments (and it is the strategic background of next Structural Funds programming period 2007-2013), but policy design and policy delivery are increasingly combined with local and sectoral stakeholders in the region and the national authorities. The open coordination mechanisms may well be an important lesson for politically powerless regions.

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Ontario, Canada

**Population:** 12.5m (39% of Canada) (2005)

**GDP (‘v’ national):** Nominal GDP C$517,407m; 40% of Canada total (2004); Forecast GDP growth: Ontario 2.3%, Canada 3.2 (2006)

**Employment rate (‘v’ national):** Ontario 63.6%; Canada 62.9% (2006)

**Unemployment rate (‘v’ national):** Ontario 6.2%; Canada 6.4% (2005)

**Business stock (‘v’ national):** Number of business establishments: Ontario 800,206; Canada 2,228,572 (2003); Number of business establishments per 1000 population: Ontario 65.4; Canada 70.5 (2003)

**Sectoral Structure:** Ontario % of GDP: 1.7 primary, 28.5 secondary, 69.9 tertiary (2004)

**R&D - % of employment (‘v’ national):** 81,320 total (46% of Canada total) (2002)

**R&D expenditure (‘v’ national):** Ontario C$10,700m (45% of Canada total) (2003)

**Economic History**

Ontario is the industrial heartland of Canada Ontario and a province in the Canadian federation. The province is the economic motor of its national economy, accounting for around 40% of Canada’s total GDP and employment (Wolfe and Gertler 2001). Historically, Canada’s national development strategy and its privileged position within the British Empire shaped Ontario’s local and regional development trajectory. Latterly, the relationship with the US has become economically and politically dominant, especially given its geographical proximity. The particular form of post-war growth and prosperity experienced by Ontario has left the province with a legacy of structural issues. These include a branch plant economy due to high levels of foreign-ownership, under-investment in R&D and a wage advantage for labour with comparable skills and productivity relative to the US due mainly to state-provided social benefits, including public healthcare.

During the 1950s and 1960s, Canada’s National Plan embodied Keynesian demand management and opened the economy to free trade and the foreign investment-led modernisation of its resource and manufacturing sectors (Wolfe and Creutzberg 2003). Post-war growth and prosperity disproportionately favoured Ontario through Federal import substitution industrialisation, patent legislation and preferred trading links with the Commonwealth remnants of the British Empire. This ‘Golden Age’ reached its limits with stagflation, internationalisation, overcapacity and intensified competition from the 1970s.
Trade-led adjustment accelerated the global and especially US integration of Canada and Ontario in an emergent North American economy, following the Auto Pact in the late 1960s, the Free Trade Agreement (FTA) in 1989 and its successor the North American Free Trade Agreement (NAFTA) with Mexico in 1994. Trade and investment flows were liberalised and cross-border production networks expanded as indigenous Canadian firms sought expansion into the larger and more lucrative US market (Wolfe and Creutzberg 2003). Cross-border rationalisation has proceeded through mergers and acquisitions, forging links between Canadian and US and global firms (Wolfe and Gertler 2001), whilst externally-oriented development, low wage and low value-added activities have been readily outsourced to southern US states and Mexico in the context of external control and foreign-ownership.

Exports and imports in key sectors are now dominated by trade with the US; Ontario’s exports to the US account for around 45% of its GDP (Courchene 2001). This reflects how the ‘East-West’ national Canadian economy has been supplanted by a series of ‘North-South’, cross-border ‘regional’ economies between Canada and the US. Ontario has reoriented itself from a provincial economic heartland and focal point for the trans-Canadian economy to a North American region-state, building upon its close geographical proximity to major US markets in the Great Lakes. Central to this transformation is Greater Toronto’s evolution from a provincial capital with significant international reach to a global city-region. Ontario and Greater Toronto are now seeking to build their broader roles in the North American and international context while preserving their national positions within Canada.

Recent Economic Change

From the early 1980s, Ontario experienced a sustained period of economic restructuring triggered by globalisation, technological change and intensified competition; all of which have been accelerated by economic integration with the US (Wolfe and Gertler 2001). The early 1990s recession was the deepest since the 1930s Great Depression, worsened by tight macro-economic policy, high interest rates and currency appreciation, a new Federal value-added tax and a US business cycle downswing. Ontario’s output contracted by 7.8% and 320,000 jobs were lost - almost two thirds in manufacturing – such that unemployment rose above 10% and investment collapsed (Wolfe and Creutzberg 2003). Amidst a modest recovery in the late 1990s and early 2000s, Ontario’s growth has diverged and under-performed the national average but remains the highest amongst the Canadian provinces (Figure 3.13).

Total employment has grown in the upturn and employment rates have converged toward but remain above the national average (Figures 3.14 and 3.15). Employment rates in Ontario have tracked the lower Canadian national level, declining and converging since the early 1990s recession and recovery. Unemployment remains volatile, fluctuating with the national business cycle (Figure 3.16).
Figure 3.13: GDP at market prices (income-based) for selected provinces and Canada, 1989-2003

![Graph showing GDP at market prices for Canada, Ontario, Quebec, Alberta, and British Columbia from 1989 to 2003.]

Source: Calculated from Statistics Canada (2005)

Figure 3.14: Total employment, Ontario, 1960-2001

![Graph showing total employment in Ontario from 1950 to 2010.]

Source: Calculated from Wolfe and Creutzberg (2003: 73)
R&D employment in the region rose by over a third between 1993 and 2002 from 127,000 to 177,000. Of this employment, 63% were employed in business, 27% in higher education, 8% in the federal and 2% in the provincial governments. A total of 112,630 or 64% were researchers. Technicians were 40,380 FTEs and other support staff 24,110 (14%). The two provinces with the highest concentration of R&D personnel were Ontario (46%) and Quebec (31%), followed by British Columbia (9%) and Alberta (7%). Ontario ranks second behind Quebec in its total expenditure on R&D as a proportion of GDP and above the national Canadian level (Figure 3.17).
**Figure 3.17: Total domestic expenditures on R&D as a percentage of GDP, Canada and jurisdictions, 1991, 1995 and 2000**

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<tr>
<td>Canada</td>
<td>1.6</td>
<td>1.7</td>
<td>1.8</td>
</tr>
</tbody>
</table>
| % of provincial/territorial GDP
| Newfoundland and Labrador | 1.1  | 0.9  | 1.0  |
| Prince Edward Island | 0.7  | 0.6  | 1.1  |
| Nova Scotia         | 1.4  | 1.4  | 1.5  |
| New Brunswick       | 0.9  | 0.9  | 0.8  |
| Quebec              | 1.8  | 2.1  | 2.3  |
| Ontario             | 1.6  | 1.9  | 2.1  |
| Manitoba            | 1.2  | 1.1  | 1.2  |
| Saskatchewan        | 1.0  | 1.0  | 1.1  |
| Alberta             | 1.1  | 1.1  | 0.9  |
| British Columbia    | 1.0  | 1.0  | 1.2  |
| Yukon, Northwest Territories, Nunavut | 0.0  | 0.1  | 0.2  |

Source: Statistics Canada (2006)

Ontario has witnessed relatively strong growth in business and higher education research expenditure on R&D but only modest increases in Federal investment (Figure 3.18). Quebec and Ontario figures exclude federal government expenditures allocated in the National Capital Region. Expenditures contributed by the provincial governments and private non-profit sector are not shown here because of the relatively smaller role that they play in conducting R&D in Canada. Provinces are ranked by percentage change in university expenditure.
Despite de-industrialisation and the structural shift towards services revealed in the high proportion of service employment (Figure 3.19), Ontario remains a manufacturing heartland producing over 50% of national manufacturing GDP in Canada (Wolfe and Gertler 2001). Nearly half of all jobs in the province are in manufacturing. Although the productivity gap with the US remains it has narrowed amidst lower employment levels. During the late 1990s economic recovery, high-tech sectors experienced high output and productivity growth while the overall number of plants and jobs fell (Wolfe and Gertler 2001). Automotive assembly and parts dominate manufacturing (principally ‘The Big Three’: Ford, GM and Daimler-Chrysler) and Japanese transplants (Toyota, Honda, Suzuki-GM), and the province is the second largest producer in North America after the US state of Michigan.

Electrical and electronics products, especially telecommunications equipment, remain important in the regional economy. Leading high-tech firms have been attracted (for
example, Silicon Valley-based Cisco Systems) to tap into highly qualified, productive and, compared to the US, relatively lower wage labour. Supported by a dense research infrastructure, information technology industries in Ontario include 8,000 firms and employ over 300,000 in the ‘Technology Triangle’ around Cambridge, Kitchener, Waterloo and Guelph and ‘Silicon Valley North’ in the Ottawa-Carleton region (Leibovitz 2003; Wolfe and Creutzberg 2003). Ontario, especially Toronto, is attractive for high skilled labour from within Canada and internationally. In terms of attracting the exogenous resources potentially offered by the ‘creative class’, recent research compares Canadian cities respectably on creativity indices with city-regions in North America (Gertler, Florida, Gates and Vinodrai 2002).

Alongside concentrations of foreign ownership, Ontario has a strong indigenous sector of home grown international companies with headquarters and key R&D functions in the province, for example in telecommunications and aerospace (e.g. Nortel Networks, Bombardier). Indigenous banking is important too. Toronto is a key financial centre nationally and third after New York and San Francisco in North America.

Interventions

Ontario has developed an innovative and sophisticated approach to small business development. Economic development and small business development are constitutional jurisdictions shared by the federal government and the provinces. The historical focus on top-down, nationally-centred policy development and delivery has shifted toward a more decentralised system with greater provincial and municipal responsibilities since the 1990s.

Nationally, Canada has a vibrant entrepreneurial culture, ranked second amongst the G7 countries in the Global Entrepreneurship Monitor research programme. This is echoed in Ontario, particularly Toronto. Ontario was first in the recent ranking of small business potential by province and it is keen to continue to build on this potential (Figure 3.20).

Policy development is supported at the federal level by Industry Canada – a portfolio organisation involving 15 federal Ministries and agencies – with a dedicated Small Business Policy Branch that provides strategic policy and programme advice at Federal, Provincial and Municipal levels. The Small Business Policy Branch is charged with implementing the Small Business Policy Agenda that aims to ensure the business environment is conducive to small business growth, and to target government resources more effectively to enhance small firm competitiveness and growth in a global economy. A shift in approach is also evident away from direct subsidy toward ‘softer’ forms of support, especially greater access to information. The joint federal and provincial policy and service delivery is through the Canada-Ontario Business Service Centre, a ‘single window’ institution, jointly managed by Industry Canada and the Ontario Ministry of Consumer and Business Services. The Centre provides information on federal and provincial business support programmes, services and regulations. It was designed to simplify and reduce barriers to SME access to programme information and reduce the costs to government of programme delivery.
**Figure 3.20 Ranking of small business potential by province, 2003**

<table>
<thead>
<tr>
<th>Province</th>
<th>Score</th>
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<tbody>
<tr>
<td>Ontario</td>
<td>10.0</td>
</tr>
<tr>
<td>Alberta</td>
<td>9.8</td>
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<tr>
<td>BC</td>
<td>9.5</td>
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<tr>
<td>Quebec</td>
<td>9.5</td>
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<tr>
<td>Manitoba</td>
<td>9.2</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>9.0</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>8.8</td>
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<tr>
<td>PEI</td>
<td>8.8</td>
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<tr>
<td>New Brunswick</td>
<td>8.7</td>
</tr>
<tr>
<td>Newfoundland &amp; Labrador</td>
<td>8.5</td>
</tr>
</tbody>
</table>

*The score is a composite measure compiled from self-employment growth, GDP growth, share of self-employment in industries with above average projected growth, share of small business in large urban centres, share of small firms that are subcontractors, survival rate probabilities of staying in business for more than 3 years, share of foreign-born population, projected growth in 35-55 age group.*

Source: Tal (2003: 21)

In the context of the provincial development strategy that aims “to promote the transition of the Ontario economy towards those sectors and firms with the capacity to generate higher wage, higher value-added and environmentally sustainable jobs”, entrepreneurship is a key element. In particular, a US-inspired individualistic entrepreneurial model is favoured. An explicit small business strategy has been developed emphasising the sector’s contributions to innovation, investment and employment creation in Ontario. The strategy connects to the late 1990s federal government review and policy shift toward deliberate targeting of the 4% of existing businesses with growth potential rather encouraging a general increase in total business start-ups. Reinforced by the political change in Ontario during the 1990s, the strategy emphasises reduced taxation, regulation and administration, equity financing and more efficient programme and service delivery. Policy targeting is evident, especially for women and aboriginal groups, but more limited than hitherto. In addition, the strategy connects entrepreneurship and innovation policy in its links to the provincial Research Commercialisation Strategy, including seed capital, to strengthen the local capacity to test ideas, encourage growth-oriented spin-offs and deepen research collaboration and technology transfer activities. Entrepreneurship and innovation promotion are wedded together within the strategies.

The new strategy has underpinned institutional reorganisation for policy delivery at the provincial level. Total budget for the Ontario Ministry of Economic Development and Trade was C$264m (£186m) for 2002-03 of which C$40m (£28m) (15% of the total) was allocated to competitiveness and business development, including the main small
business programmes. Within the Ontario Ministry of Economic Development and Trade, Small Business Central links and signposts small business services, including on-line registration, renewal and reporting services through the Ontario Business Connects website. The Small Business Agency of Ontario is newly established and comprises representatives of Ontario’s business community and Members of the Provincial Parliament in Ontario. It aims to champion the small business agenda, provide a voice and direct connection to province-level policy development and decision-making, reduce regulatory and administrative burdens and improve small business to government interactions. A new Small and Medium Enterprise Division has also been established within the Ministry of Economic Development and Trade to address small business needs and champion small business across the provincial government.

Within the province, services are differentiated by type of business and geographical coverage. Regional-level Business Advisory Offices operate in southern, eastern and central areas and focus on support to existing innovative and growth-oriented small businesses through Business Development Consultants. At the sub-regional and local scales, a network of Small Business Enterprise Centres focuses on business start-ups and early stage business development. For example, Enterprise Toronto provides access to information services for new and existing SMEs, including business consulting services, management, marketing, technology and financing. Managed through the City of Toronto Economic Development Office, Enterprise Toronto is a public-private sector alliance providing a ‘one stop sourcing’ for services and programmes for entrepreneurs and small businesses in Toronto.

A number of policy challenges remain for the small business strategy. Many newly established small businesses are not growth-oriented and remain small, typically employing under 4 people. Policy has had limited impact in encouraging further growth amongst such businesses, particularly given its explicit focus upon potential high growth businesses. The ‘softer’ forms of support utilising information sources and websites are less costly but their longer term effectiveness has yet to be confirmed. Gaps exist in small firm financing provision and Toronto ranked third behind Vancouver and Montreal for venture capital financing in 2001 (Wolfe and Creutzberg 2003). At provincial level, the effectiveness of the new Small Business Agency of Ontario and Small and Medium Enterprise Division is yet to be assessed. The multi-level federal system operates at different geographical scales, national, sub-national and local. Some co-ordination and integration questions between the different levels remain, especially between Ministries at the Federal level and between the federal level and the provinces.

Lessons

The Ontario experience suggests a number of issues for North East England:

- An explicit small business strategy closely embedded within the broader economic development strategy as a framework for action and to signal the strategic priority given to this policy area
- Priority focus upon small businesses with growth potential, although recognising that other small businesses with less growth potential remain important in output and employment terms.
- Stronger connections and formal alignment of small business and innovation and research commercialisation strategy and policy
- Institutional champions for small business and entrepreneurship at Federal (national) and Provincial (sub-national) levels to promote and develop issues across government Ministries and agencies.
- Integrated and decentralised policy design and delivery system with strong horizontal — across levels — and vertical — between levels — relations and coordination across and between institutions
- Context-sensitive strategy design, policy development and appropriate target setting.
- Openness to both indigenous and imported sources of enterprise.
- Appropriate targeting (growth, technology, social groups such as black and minority ethnic communities, women and young people, and/or geographical areas).
- ‘Soft’ (information) and ‘hard’ (equity finance) support
- ‘Single window’ or ‘one stop sourcing’ service delivery.

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Piedmont/Turin, Italy

<table>
<thead>
<tr>
<th></th>
<th>Turin</th>
<th>Piedmont</th>
<th>Italy</th>
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<td>58m (2006)</td>
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<td>8.5%; 120% EU ave.</td>
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<td>1.7%</td>
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<tr>
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<td>Tertiary</td>
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<tr>
<td>Employment rate</td>
<td>Piedmont</td>
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<tr>
<td></td>
<td>48.5%</td>
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</table>

Economic History

The city and wider Piedmont region have related though distinct economies with, for instance, stronger representation of primary industries in the region as a whole, and a greater focus on services in Turin. Turin has been a major centre of Italian industry since the 19th century, and came to be dominated in the twentieth by FIAT and the automotive industry. In the 1950s, Turin’s industries developed rapidly, attracting waves of migrants from the south of Italy. The population grew to 1 million in 1960 and reached a peak of 1.5 million in 1975. In the 1980s the first industrial crisis hit the city and its population began to decline to a current level of 900,000, although the broader metropolitan area was still growing at this time.

The first major problems for the city appeared in the 1970s, with substantial lay-offs taking place at FIAT and associated firms. Although many ex-Fiat employees subsequently set up their own engineering companies and networks, which thrived and worked with international clients, the 1980s proved disastrous again for Turin when Fiat moved the core of its production activities to Melfi in Southern Italy.

An urgent need of for diversification was widely accepted, and initial attempts made to modernise the industrial economy by using public policy support to move into high tech areas such as robotics. Examples of projects undertaken during this time included the Technocity project launched by Fondazione Agnelli to create a high tech industrial district and the transformation, in 1982, of Fiat’s famous Lingotto building, once the largest car factory in the world, into a public centre including a convention centre, concert hall, art gallery, shopping centre and hotel.

In 1986 the city instituted a new masterplan which focused new development along a transport spine, putting railway lines underground, rebuilding roads on top and focusing new development in the city into areas vacated by declining industry. Some
diversification did occur during this period, laying the basis for the city-regional economy that now exists, which has moved some distance from its car-dominated antecedents. However, in the late 1980s and 1990s public sector actors attempts to re-orient Turin’s growth path were hindered by city politics, with high instability, oscillation of political office between competing parties with different agendas and consequent low governmental effectiveness.

Today, although service industries comprise a higher proportion of Turin’s economy than manufacturing, these comprise a wide range of sectors, so the car industry still exhibits a disproportionate presence, with Fiat still employing 15,000 workers in addition to a strong auto components sector. Other important industrial sectors have also grown up in recent years, including industrial automation, aeronautical parts, information technology and satellite systems. The food and drink industry is also a large employer together with textiles, banking and insurance and the publishing sector. Torino is home to a large number of research and development activities and has the highest proportion of private spending on R&D in Italy. The recent decision by US mobile-maker Motorola to build a regional research centre for wireless communications technology in the city provides an indication that, to some extent at least, Turin’s efforts to re-orient itself for the 21st century are having some success.

Recent Economic Change

Key statistics for both Turin and Piedmont are presented below to illustrate recent economic trends. In terms of GDP growth, the Piedmont region has slightly underperformed national trends in recent years for which data is available. Figure 3.21 illustrates that GDP was stagnant or declining slightly in the early years of the twenty-first century. Although the national economy performed slightly better, it is worth noting that Italy’s economy as a whole has also performed weakly in recent years, with GDP growth in 2002-2004 averaging just 0.4%.

Figure 3.21: GDP Growth, Piedmont vs. Italy, 1997 - 2003
In spite of a poor record of economic growth recently, other key indicators for Turin and Piedmont suggest that underlying economic performance is perhaps stronger than GDP growth rates to up to 2003 suggest.

In terms of generating new businesses, both Turin and Piedmont witnessed a net increase in the stock of firms over the period 2001 – 2004 (the rate of increase for Turin was nearly twice that of the region during this period suggesting a more buoyant city economy). Turin also performed better than the national average (in years for which data is available) though Piedmont province was notably worse (Figure 3.22).

**Figure 3.22: Change in stock of businesses, Turin and Piedmont, 2000-2004**

![Graph showing change in stock of businesses, Turin and Piedmont, 2000-2004](image)

In terms of unemployment figures, both Piedmont and Turin show considerably stronger performance than Italy as a whole (Figure 3.23). Unemployment fell strongly in both the city and region between 1998 and 2001, and has since remained at around the 5%-6% level. Turin’s performance is notable in particular, being close to the national average at the end of the 1990s, but significantly better during the first half of the 2000s.

**Figure 3.23: Change in Unemployment, Turin, Piedmont and Italy, 1998-2004**

![Graph showing change in unemployment, Turin, Piedmont and Italy, 1998-2004](image)
In terms of R&D, the region holds a significant position within Italy. Turin has the highest proportion of private sector R&D spend of any Italian city, around 25% of national R&D investment is in Turin / Piedmont and an estimated 18% of Italy’s high tech employees are located in the region.

Interventions

The late 1990s saw a successful collective effort to transform Turin’s future. Local politicians stopped infighting and were able to craft a degree of consensus to prioritise Turin’s turnaround by focusing on a vision for a new Turin: that of an international, rather than an automobile, city. In May 1998, the Mayor of Turin launched the strategic development plan for the City. The plan charted a future scenario for the city over the following ten years, including elements of economic development, tourism promotion, a cultural strategy and governance reform. The plan was drawn up after 20 months of consultation, based on contributions from the city’s main institutional, social, economic and cultural actors.

Although focused at the level of Turin and its metropolitan area in scope and scale, the plan bears some resemblance to the economic strategies prepared by UK RDAs. It is different to these, however, in its strong focus on measures to promote Turin nationally and internationally, which have been prompted by the realisation that Turin was suffering from an image still tied very much tied to its industrial past. The plan was also closely tied with preparations for the 2006 Winter Olympics, with the explicit aim of replacing the traditional image of Turin as a city of car factories and smog with one of urban rejuvenation of the kind that helped turn Barcelona into one of Europe’s most cosmopolitan centres. An indication of the ambition of the plan and perceived scale of transformation required, was revealed in the comments of Paolo Veri, director of the Torino Internazionale project (see below): “once we were the capital of Italy, then we were the capital of its industry. Now we are entering our third big phase.”

The Institutional Context for Intervention

This section briefly outlines the political-administrative arrangement in order to explain the institutional context in which the strategic plan was developed. There are three main levels of government (this applies to Italy in general), with all three playing some strategic role within their boundaries.

- **Municipal (Turin):** The City of Turin has the most relevant responsibility for city planning, strategic planning, etc. It was the Mayor, Valentino Castellani, who launched the Strategic Plan in 1998. The City of Turin is the most important actor at the city level. Its strategic influence also extends to the Province and the Region, and along with two other “local-level” actors—the Turin Polytechnic and the private sector (bank foundations, business associations, CCI)—is the most important within the Piedmont region. Collectively, these three are known as the “iron triangle”. The iron triangle has, with the assistance of the Province and the Region, spawned two main agencies to deliver promotional, inward
investment and economic development activities: ITP (Investments for Turin and Piedmont) and the Torino Internazionale Association.

- **Provincial (Turin):** This area represents more than the metropolitan area in strict terms, and is not the “Greater Turin area” if we use “Greater London” as a reference. Until recently a very weak government level in terms of delivery, with limited responsibility for urban planning and development strategies, they are increasingly relevant due to recent legislation. An example is the recently introduced “Territorial Plan for a Coordinated Province” (PTCP), a sort of strategic development plan for the province. Municipalities have to comply to PTCP regulations when creating their master plans.

- **Regional (Piedmont):** Italian regions have significant budgets and an increasing power in legislative terms. Importantly, the Piedmont Region manages the structural funds that have been instrumental in the region and finances projects through its finance arm, Finpiemonte. Although the region’s influence is increasing, the metropolitan level is still most relevant when it comes to image changing and economic development.

It is unusual in Italy to find a joint effort by the three government levels to pursue common goals due to conflicting coalitions in power at the various governmental levels. In the specific case of Turin the unusually good relations between city, province and region can therefore be considered a very relevant success factor. Specifically, the Fiat question led to a common problem definition and consensus amongst actors over how to redefine Turin’s image as a business location. Apart from avoiding conflicts, the consensus among the three levels has made it possible to mobilise a suitable amount of resources in local policy making.

Economic development is not traditionally a policy area in the hands of local authorities. For example, municipalities do not have a department dedicated to economic development, and policy instruments for economic development at the local level are traditionally linked to urban planning policies (e.g. the creation of new industrial areas). As such, many of the institutions and organisations are “ad-hoc”. Some organisations, however, are attached to a level of government. Within the City of Turin, examples are the Special Periphery Project, Special Communication Project and International Relations Unit. That being said, their activities are not only funded by the municipality, or only by public bodies. In other cases the ad hoc organisations are set up, controlled and financed by a variety of institutional (at different levels) and private actors, making it difficult to relate them directly to a specific government level. One example is ITP.

The complex set of policies which have been enacted over the past years in Turin, and which are planned in the near future, can be represented in three main policy layers:

1. Policies aimed at the creation/reinforcement of various types of resources (economical, environmental, social, cultural, institutional) to make Turin an attractive location for new business.

2. Policies aimed at creating, representing and diffusing a new image of Turin as a place to live and work (marketing the city in a PR sense).

3. Policies aimed at helping foreign investors to locate to Turin (internationalisation in a sense).
With reference to the first layer (policies aimed at the creation/reinforcement of different resources), these policies define the structure of urban development strategies by the responsible institutions (City of Turin, etc.). Specific examples include: establishing *Torino Internazionale*, the Strategic Plan for Turin; initiating the Progetto Speciale Periferie project; winning the 2006 Olympic Games and establishing a specific institution to manage them (TOROC).

The second layer—PR for Turin—includes Torino Comunicazione (the official communications strategy, part of the City of Turin) and the Olympic Games.

The third layer—policies and programmes for attracting foreign investors—includes actions such as those of ITP and the creation of business parks.

**Projects**

*a) The Strategic Plan, Visioning and the International Promotion of Turin*

In May 1998, the Mayor of Turin launched the strategic development plan for the City.

There are 6 “strategic lines” to the Plan, as follows:

- Integrate the metropolitan area into the international system
- Construct a metropolitan government
- Develop training and research as strategic resources
- Promote enterprise and employment
- Promote Turin as a city of culture, tourism, commerce and sport
- Improve urban quality

The Strategic Plan included actions to initiate or support the development of a number of the initiatives described below. Judged to be a relative success, the city is currently in the process of drawing up a second plan to succeed it.

*b) Communication Strategies*

_Progetto Speciale Comunicazione_ (Special Communication Project) was created by the Municipality of Turin in 1999 in order to coordinate all the actions by the Municipality related to the provision and dissemination of information about its activities. In more specific terms the project provides information for citizens and promotes the city nationally and internationally. More recently it focused its activity on the promotion of Turin as part of the Olympic Games plan. The Project also worked on the creation of a new visual identity of the City of Turin resulting in the logo ‘Torino non sta mai ferma’ (Torino is never closed!), used in promotion campaigns, and in particular in the Olympic Games campaign.

*c) Tourism Marketing Policies*

Tourism in Turin is for the most part business tourism; some 80% of visitors are on business in the region. In 1999 research highlighted the poor image of Turin held by many international opinion leaders. The more frequent adjectives used to define the city were: cold, boring, efficient, and grey. Clearly the problem was trying to change...
this image, designing a strategy to promote Turin in Italy and abroad as an attractive city, not only for business but also for visitors on holiday.

Two agencies were set up to act as focal points on tourism promotion:

- **Turismo Torino** is an agency founded in 1998 by Province of Turin, Turin Chamber of Commerce, City of Turin and seven other municipalities of the metropolitan area. The agency is tasked with the promotion of the City (it has its own offices in Barcelona, Dusseldorf, London, and Paris), and with the provision of information for tourists.

- **Convention Bureau** is a company established in 2000 aimed at strengthening the role of Turin as city for congresses and conventions, providing information and helping organisers in finding the best solutions for their needs.

d) 2006 Winter Olympics

The games have been the most significant recent event on the tourism agenda and a key element in the international promotion of the city. Public funding worth US$18bn was spent on construction for the games, with a further contribution of US$1.2 bn from sponsorship and TV rights paying towards actual organisation of the event. Connecting international events with wider regeneration strategies is of course a widely used strategy, but not one without risks. For example, significant investments were made for the World Football Championship, which took place in Italy in 1990. However, little, if any, positive impacts in terms of urban regeneration and local development were associated with the event. In Turin, considerable resources were invested in strategic thinking in the run-up to the Olympics to ensure long-term and sustained impacts. Examples of concrete projects resulting from this include:

- Restoration of historic buildings to improve the city’s tourist product after the games are over
- Developing castle, wine and spa tourism routes linking Turin tourism with the wider region
- Building on the attention attracted to Turin by the games by scheduling a line of other events including the 2006 Paralympics, World Design Capital 2008, international student games etc.
- Converting infrastructure built for the games to deliver long-term strategic benefits e.g. using some Olympic Villages for university expansion, art galleries etc.

e) Cultural Policies – Creating a Vibrant Sense of Place

The importance of culture and a sense of place and collective self worth is recognised by the vast majority of stakeholders in Turin. In order to achieve this goal Piedmont and Turin have been active on a number of fronts devising programmes aimed at improving the national and international position of the city as a centre of culture.

Indicative projects promoting the heritage and culture of the region and the city include:

- The recovery and conservation of the “Residenze sabaude”, a system of old castles and villas around Turin declared as a world heritage site by UNESCO.
- Expansion of the Modern Art Gallery and the Rivoli Castle which are tasked with presenting and promoting the heritage of contemporary art owned by Turin City.
- The recent construction of the Virtual Reality and Multimedia Park.

f) Engaging the World, the Foreign Centre of Unioncamere

Unioncamere (the Association of Piedmont Chambers of Commerce), jointly with other public and private bodies, established a Foreign Centre to develop the external economic relations of the enterprises of the region. The Centre supplies services in the fields of information, training, consulting and promotion. The aim is to promote the region and its economic actors abroad, and to help the local enterprises concerning their internationalisation strategies.

Other interventions

In addition to image-changing interventions a number of major activities have also been initiated aimed at improving living standards and economic competitiveness.

g) Progetto Speciale Periferie (Periphery Special Project)

In 1997, the City of Turin set up the Periphery Special Project, a special unit within the administration addressing urban regeneration issues. Its tasks have been to tackle the complex problems of the suburban areas in an integrated manner and co-ordinating in one single “master plan” different interventions on the periphery.

h) Projects to secure Turin’s position as an R&D centre

Turin currently has the highest proportion of private sector R&D spend of any Italian city, and the region as a whole accounts for 25% of national R&D investment. A number of projects to support this strength were initiated under the Strategic Plan.

- The Turin Wireless project, established in 2001, is a national pilot initiative for prompting the development of the Turin area in the field of ICT. The initiative plans to double the number of researchers in the wireless sector, while generating at least fifty new companies by 2011. The project is based on an investment of roughly 130 millions euros (approximately £83 million) over five years from public and private funding.

- The Turin Incubator was established in 1999, by the Polytechnic of Turin, the Province of Turin, Chamber of Commerce and Finpiemonte to foster the creation and development of new companies.

- Tecnorete Piemonte was established in 2001 as a not-for-profit consortium with Finpiemonte, university and private sector representation to develop the seven science and technology parks in the region and integrate them with the existing university research base.

i) Transport Improvements

In addition to the interventions described above, a number of major transport investments have been made by the central, regional and city governments in recent
years. These are important in terms of linking Turin more directly to major cities in Western Europe (e.g. up through France via Lyons to the UK and northern Europe, along France’s Mediterranean coast into Catalonia, etc.) These include developments in “Corridor 5”, one of the EU’s priority infrastructure development lines. By 2020, more than €40 bn will have been invested in Piedmont for new works and improvements, including:

- Turin – Lyon high speed line (reducing travel time from 3 hours 40 minutes to 1 hour 30 minutes) by 2013
- Turin – Milan high speed line, with journey times cut to 50 minutes from a current 1 hour 45 minutes by 2009.
- Other lines – for example, linking Turin to coastal ports, and Turin Casselle airport with the city centre.

Such developments help give credence to the Piedmont development slogan, “Live In Italy, Work in Europe”.

The measurement and evaluation of the impact of image-changing interventions is not an easy task; nevertheless, some indications of success are discernible in terms of promoting a positive image of Turin and Piedmont to foreign investors, and to both business visitors and tourists.

Turin has performed well in recent years in attracting inward investment. The percentage of all FDI in Italy attracted by Turin has fluctuated in recent years, as is the norm where a single large investment in a particular year can have a large effect on overall figures. However, over the period 1999 – 2004, Turin Province attracted 7.8% of Italian FDI, a slightly higher proportion than its share of Italian GDP over the same period (see Figure 3.24).

**Figure 3.24: Foreign Direct Investment in Turin Province and Italy, 1999 – 2004 (€m)**

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<thead>
<tr>
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<th>Turin Province</th>
<th>Italy</th>
<th>Turin Province as % of Italy</th>
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<td>1999</td>
<td>647</td>
<td>6,967</td>
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<td>2004</td>
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Turin is focusing strongly on the objective of attracting "knowledge workers" to the city, and has plans to increase R&D as a proportion of local GDP from 5% to 10% by 2009, and to increase the number of workers from 2,000 to 4,000 - 6,000 during the same period. Part of this is to be achieved by some of the specific initiatives directly relating to R&D already mentioned (e.g. Torino Wireless). However, it's important to note that attention has been deliberately placed on an integrated, strategic programme of initiatives, including improvements to the physical urban form, cultural initiatives such as opening new museums, or the Olympics and successor events. These have a value in their own right, but also combine with more traditional "economic development"
initiatives to increase the overall appeal of the city to higher skilled workers and entrepreneurs.

Similarly, Turin and Piedmont have both demonstrated an increasing ability to attract visitors (see Figure 3.25). Although traditionally a less attractive destination than many other Italian cities (e.g. Rome, Florence, Venice etc.), both Turin and Piedmont have increased the number of bed nights spent in the city, with these growing at a compound annual growth rate of 2.9% during 2000 – 2004 in both cases. The number of arrivals grew by 11% between 2002 and 2004 at Turin’s Casselle Airport, and this number will certainly be substantially higher for 2006 after the Winter Olympics. There were also just under 450,000 visitors to business conventions in Turin in 2004, rising by 34% on the previous year.

Figure 3.25: Total Bed-Nights, Turin and Piedmont, 2001 - 2004

Finally, some other developments are interesting in terms of illustrating “softer” indicators of success in image-changing efforts. UK and French travel publishers Lonely Planet and Gallimard have both published their first tourist guides to Turin and Piedmont in the last two years. In addition, both Easy Jet and Sky Europe have added Turin to their list of flight destinations. It should be expected that both these developments would further boost tourism in the area in coming years.

Lessons

This case study focuses on the issue of how transforming the image of a place can contribute to wider efforts to promote regional economic development. In this instance, although broad economic development efforts have included activities at both city and
regional level, image changing activities were focused Turin to a far greater extent than the wider Piedmont region. This overview therefore focuses primarily on Turin and its environs, while making reference to the regional dimension where this has also been important. Turin’s experience can be broadly defined in terms of the following a) defining the problem and achieving a shared consensus of a vision and b) producing a three-pronged policy development strategy.

Some of the key lessons can be identified as follows:

- Definition of key economic development issues facing the city and crafting of a consensus to address them among main stakeholders and political actors
- Development of a three layered strategy ensuring that Turin “has all its bases covered”.
- A sharp increase in visitor numbers to Turin and Piedmont before the Olympic Games were held.
- Holding of a major event with “succession planning” integrated into Olympic programme to ensure that benefits are not peripheral
- Ongoing support for R&D promoted economic development in Turin, integrated into wider developments through the mechanism of the Strategic Plan and Torino Internazionale.

On balance, the most striking aspect of Turin’s experience appears to be the elements of institutional innovation and strategic planning. Key success factors in successfully developing these might be:

- Using the strategic planning process to develop a consensus between different stakeholders and levels of government. In Turin and the wider Piedmont region this was possible through the impact of a traumatic event(s) i.e. the decline of Fiat in the city. This is a successful instance in which “city region” planning has become possible, and is notable because of the contrasting experience elsewhere in Italy.
- Adopting a single focus for the plan. There are some important interventions described above with little relation to image-changing (e.g. the area-based regeneration Periphery Special Project). However, many of the major interventions are associated with “internationalisation” and are linked with this theme even where the main benefits were intended for Turin and Piedmont’s citizens. The internationalisation theme in Turin is arguably more focused than UK’s broader regional economic strategies, and it is an interesting question whether this kind of focus is more appropriate for a city or city region.
- Ability to develop new institutional solutions for perceived problems in spite of fuzzy responsibility for issues such as economic development between different levels of government. Examples of new institutions in Turin / Piedmont over the last ten years include ITP, Finpiemonte, Torino Turismo, the Convention Bureau, TOROC, Tecnorete and Torino Internazionale itself. This could be described as the development of (apparently) successful “institutional thickness”. It is also an interesting question to consider whether this “associational” arrangement (as opposed to, for example, bringing all agencies under control of a single regional agency) provides greater flexibility or results in more effective institutions.
Key References


Urban Audit website statistics for Turin available online at [http://www.urbanaudit.org/CityProfiles.aspx](http://www.urbanaudit.org/CityProfiles.aspx)


Styria, Austria

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<tbody>
<tr>
<td>67.8% (2002)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unemployment rate ('v' national):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styria 7.0%; Austria 7.1% (2004)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business stock ('v' national):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of business establishments: Styria 31,837; 13.2% of Austria (2004);</td>
</tr>
<tr>
<td>Annual growth 2000-2004 Styria 0.1% (Austria: -0.1%)</td>
</tr>
<tr>
<td>Proportion of employment in SMEs (250 employees and below) Styria 58.4% (Austria 60.3%) (2004)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sectoral Structure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(% of employment)</td>
</tr>
<tr>
<td>Primary 1.1% (Austria 0.9%);</td>
</tr>
<tr>
<td>Secondary 31.8% (Austria 28.0%);</td>
</tr>
<tr>
<td>Tertiary 67.1% (Austria 71.2%) (2004)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R&amp;D expenditure ('v' national):</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.67% of Gross Domestic Expenditure (GERD/BRP) (highest rate within Austria) (2002)</td>
</tr>
</tbody>
</table>

Economic History

Styria remains one of the industrial heartlands of the Austrian economy with 32.9% (approx. 140,000 workers) of its employment derived from both primary and secondary activities. However, Styria's recent economic history reflects the painful processes of industrial restructuring and renewal common to many Old Industrial Regions across Europe.

Styria’s industrial role within Austria developed in the 19th century around coal, iron and metal products and continued as a national growth pole into the post-war period of Fordist production. From the 1960s, poor levels of industrial productivity led to Styria’s GDP growth rate increasingly lagging behind national rates. Due to
the nationalisation of basic industries in the post-war period, Styria’s economy has been heavily influenced by state-owned activities. In the 1960s and 1970s elements of downstream activities such as steel products, machinery and vehicles came under state control through vertical integration and mergers in the pursuit of economies of scale.

The decline of the steel industry became central to the region’s problems in the 1970s and 1980s. Concentrated in the sub-region of Upper Styria the steel industry began to suffer from its position on the periphery of Western Europe, adjacent to the closed markets of Central and Eastern Europe. During the 1960s and 1970s the nationalised steel industry chose to move HQ functions away from Upper Styria to Vienna, accentuating trends witnessed elsewhere in Styria’s state owned-sectors. With the loss of local planning, R&D and marketing capabilities, Styria began to develop around a branch plant model.

By the 1980s Austria’s state owned industries had entered a period of crisis leading to a decade of intensive restructuring, diversification, privatisation and rationalisation. Reflecting the sub-regional sectoral concentrations of activities within Styria the most severe economic impacts were felt in Upper Styria, an area which eventually become the largest recipient of EU Objective 2 funds in Austria. Overall Styria witnessed a modest decline in employment between 1981 and 1991 (-0.8%); Upper Styria experienced a severe contraction of the employment base (-8.8%). In particular, Upper Styria’s share of employment within secondary sector activities fell by 7.4% compared to 4.5% for the broader Styrian region. In the early 1990s the gap between Styria’s economic performance and national levels expanded - especially in terms of unemployment (8% ‘v’ 6% Austria) and GDP per head (90% of national average).

Yet, from the early to mid 1990s, the region has shown signs of emerging growth and economic renewal, especially around the Graz city-region the economic and political centre of Styria. Since the 1990s Styria has experienced a ‘catching-up’ process within Austria, especially in terms of growth, employment, new firm formation and innovation. In particular, a structural shift has occurred away from basic to more technologically intensive forms of economic activity linked to a rich and constructive regional innovation system characterised by a strong knowledge generation and diffusion system (Todtling and Trippi 2004). At the heart of the transformation appear to be networks and interfaces between the region’s education and research infrastructure and industry. Applied research, technological transfer and a clear focus upon the synergies between industry and research have stimulated the renewal and growth of key sectors such as vehicles and transport, metals and machinery, wood/paper, chemicals and pharmaceuticals and ICTs.

Styria’s recent economic revival is also linked to the region’s re-positioning within an enlarged Europe. The last decade has witnessed increased cross-border activities between Styria and states such as Hungary and Slovenia. Following recent rounds of EU accession these trade links have the potential to accelerate further. The internationalisation of the Styrian region economy is a central element of its recent recovery; FDI has played a key catalytic role in sectoral development (e.g. Chrysler, Magna in automotives) and R&D and innovation expenditure (42% of R&D expenditure in Business Enterprise Sector via FDI – Steiner et al 2005).
Recent Economic Change

From the mid 1990s the region’s economy has recovered considerably both catching up and exceeding national rates of growth. Between 1991 and 1998, Upper Styria experienced employment growth of 2.7% (as part of Styria’s more modest employment growth of 0.3%). More recently, 2002-2006, Styria achieved annual employment growth of 0.9% compared to the 0.6% rate nationally (WIBIS 2006).

Throughout the 1980s and mid 1990s unemployment within the Styrian labour market exceeded national levels (Figure 3.26). In 1993 the national unemployment rate stood at 6.8% whilst levels in Styria and Upper Styria reached 8.4% and 10.3% respectively. In terms of unemployment growth during this period (1990-1994), Upper Styria’s rise in registered unemployed (42%) far exceeded the levels experienced across Austria (29%) (Downes 1999).

Figure 3.26: Rates of Unemployment in Styria and Austria 1980-1996

Since the late 1990s, the performance of the Styrian labour market has recovered considerably. Between 2000-2004 unemployment grew much more modestly in Styria than nationally (0.6% cf. 1.2%) and, in 2004, Styria’s unemployment rate was lower than the Austrian average (Styria 7.0%; Austria 7.1%; see Figure 3.27).
From 1995 to 1999, Styria’s growth in GDP exceeded the national average, especially per capita. In terms of Gross Regional Product, between 1995-2002 Styria averaged annual growth rates of 3.6% (Figure 3.28) and in 2004 the region exhibited the highest annual GRP growth rate in Austria (3.8%) (Steiner et al 2005; WIBIS 2006). Nevertheless, in absolute terms, Styria remains ranked as only the 6th most productive Lander per capita within Austria (for example, producing only half the GRP per capita output of the Vienna region) (WIBIS 2006).
R&D expenditure represents a key indicator through which Styria has consistently outperformed the national level. Between 1998 and 2002 total expenditure in R&D within Styria increased by 51.1%, reflecting the region’s position as the highest contributor of gross domestic expenditure allocated to R&D (R&D rate) in Austria. Moreover, Styria’s 2002 R&D rate (3.67%) not only represented a significant increase from 1998 (2.53%) but also positioned the region far in excess of the EU25 average of 1.93% and above regions such as the Île de France (3.4%) (Steiner 2005; WIBIS 2006) (Figure 3.29). In employment terms, 7,120 FTEs are engaged in R&D activities. Of particular significance within Styria is the extent to which the Business Sector contributes to R&D expenditures (69.5%). The Business Sector’s contributions increased by 65.2% between 1998-2002, double the growth of public sector funding.

Figure 3.29: Regional R&D Rates (GERD/BRP) in Austria in 2002

The restructuring and recovery of the Styrian economy interrelates with the region’s changing sectoral profile. During the 1980s the manufacturing sector experienced job losses in excess of 20,000, reduced by almost a fifth between 1980 and 1992 (from 102,000 to 82,000 employees) (Todtling et al 1998). However, manufacturing employment continued to provide in excess of one fifth of regional GDP, albeit reduced from 24% to 22.2% 1981-1992. By 2004, 31.8% of employment remained within the secondary production sector, almost 4% higher than the national average. Between 2002-2006, Styria’s proportion of employment in the secondary sector declined by 2.0%, very similar to the national rate of decline (1.9%). In contrast, 67.1% of employment occurred in tertiary activities, trailing the national rate by 4.1% (WIBIS 2006).

Within the secondary sector, recent growth has been situated within the Automobiles sector (1.8%), Mechanical Engineering (0.3%) Rubber and Plastic goods (0.2%) and Chemicals (0.1%). Over 12% of the Styria’s GRP is created through the fields of basic metal and steel fabrication and almost a quarter of manufacturing GVA derives from the production of machinery (including automotive). Figure 3.30 illustrates the role of production sub-sectors in the growth and decline of the manufacturing base. Automobiles and Machinery sectors are the...
clear high-growth dimensions. Out with, but integral to, manufacturing Styria has experienced an above average growth in Knowledge Intensive Services, leading to over 17,000 jobs in 2006 (Styria 3.8%; Austria: 2.9%).

**Figure 3.30: Significance of employment in Manufacturing industries for the regional economy of Styria.**

Interventions

From the early 1990s the Styrian economy has witnessed an extensive portfolio of policy and institutional interventions to foster innovation and technology-led structural change. At the heart of the policy context is the Styrian Development Agency (SFG), founded in 1991 as an independent semi-public agency controlled and financed by the Land Government. Prior to the formation of the SFG, the executive agendas (for example, funding and promotion of entrepreneurship) were directly in the control and operation of the Land government. Following the formation of SFG, the agency has been tasked with the responsibilities to support new and growing firms, innovation and technological development. In this context, and guided by several studies commissioned into the sectoral and technological strengths of the region, SFG pioneered the development of regional cluster policies within Austria (Steiner et al 1996). From the mid 1990s, cluster and sectoral policies have been central to economic development strategies and the ensuing recovery of the Styrian regional economy.

Drawing upon commissioned research to identify existing and potential regional sector strengths, the SFG developed a strategy for upgrading the economy through an explicit technology and innovation orientated policy. The “Styrian Technology Policy Concept” (Steiner et al 1996) proposed three interrelated strategic themes:
Enhanced co-operation: produce a more integrated industrial system based around clusters, creating synergy effects for firms and associated infrastructures.

Foster the strategic absorption and diffusion of new technologies for regional competitiveness with and across firms and institutions.

Improve the skills and qualification base of the workforce to better adapt to innovation led-growth.

In 1994 SFG prioritised 4 industrial clusters as a pathway through which technological development and industrial upgrading would proceed: wood and paper; metal processing and materials; mechanical engineering and traffic and transport. The traffic and transport cluster was deemed to have the greatest potential for growth and was developed as a trailblazer cluster. Following further feasibility research, the scope of the cluster was reduced to focus upon the ‘automotive branch’ of traffic and transport.

By the mid 1990s Styria’s automotive sector consisted of several large internationally renowned Austrian producers (Magna Steyr; AVL List), a growing number of FDI projects (e.g. DaimlerChrysler), and a base of SME component suppliers and engineering firms. The development of the cluster was driven by SFG in cooperation with the Federation of Austrian Industry in Styria (FAI) and the initiative drew the support and commitment of the region’s leading automobile companies who were keen to pursue more efficient and effective supply chains. In 1996 the proposed cluster management organisation, ACStyria, was guaranteed two-years of public funding from the Styrian Minister of Economic Affairs. Following the conclusion of state funding in 1999, AC Styria became a self-funded limited company – ACStyria (GmbH) – initially assisted by a state-funded parachute payment but ultimately drawing upon membership fees alone from 2001. Membership fees are levied in relation to the annual turnover of each member (min 500 Euro to max 7,250 Euro).

Initially, the operational management of ACStyria was conducted by the SFG in association with a private external consultancy organisation. The role of SFG in providing a stable and sustainable platform upon which ACStyria could develop autonomously has proven crucial in the development of the cluster. Following the formation of ACStyria GmbH, a full-time general manager together with a project manager were appointed and the organisation has developed a physical presence with office space and facilities. Throughout the history of ACStyria, the ‘Clusterbeirat’ has provided strategic direction. The advisory board has existed since the inception of the cluster initiative and provides the role of strategy development, arbiter of interests and a learning forum. The committee consists of representatives from the leading companies, suppliers, SMEs, research institutions, customers, the Federation of Austrian industry, trade unions and the Styrian government.

The main objectives and activities of the ACStyria cluster initiative appear common to those prescribed across cluster programmes more generally (see Figure 3.31).
Figure 3.31: Activities and Practices of AC Styria

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information and Communication</td>
<td>The ACstyria acts as an information and communication platform for the automotive sector in Styria and adjacent regions. Information services for the automotive sector include, e.g. information to its members about current trends and expert knowledge on upcoming market trends, information on European development funding, organization of study trips and visits to companies, Internet presentation of the cluster and its companies, implementation of a database of the partner companies, creation of a periodical newsletter, firm-specific market studies.</td>
</tr>
<tr>
<td>Cooperation</td>
<td>The initiation, development and support of cooperation projects between companies, especially in regard to the areas of RTD, qualification and organization. For this reason, a cooperation partner exchange was maintained.</td>
</tr>
<tr>
<td>Marketing and PR</td>
<td>The provision of ACstyria information material to the general public, the positioning of the ACstyria both nationally and internationally, PR activities (Internet presentation of the cluster and its companies, development of the ACstyria logo, etc.)</td>
</tr>
<tr>
<td>Training and Qualifications</td>
<td>Drawing upon the expertise of the leading companies and expert advice, the ACstyria has organized workshops on current topics which were free for members. A wide range of educational possibilities such as special training and advisory schemes were made available. Selected training courses arranged by leading companies were opened to the employees of all cluster partners. Firm-specific consulting and coaching services also rank among the currently available or planned services.</td>
</tr>
</tbody>
</table>

Source: Adapted from Agiplan (1999)

In terms of economic performance, Figure 3.32 illustrates the growth of the cluster in its early years with employment growth and output growth significantly above national rates. From 1996 to 2002 estimates suggest that over 10,000 new jobs were created in the automotive sector (Solvell et al 2003), whilst more recently SFG claim that since 1996 employment has more than doubled to approximately 30,000 employees and matched by over EUR2 billion in investment (www.sfg.at - accessed 24/04/06).

Figure 3.32: Indicators of performance: Automotive Cluster 1995-2000

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number for firms</td>
<td>60</td>
</tr>
<tr>
<td>Number of employees</td>
<td>7900</td>
</tr>
<tr>
<td>Percentage growth in employment (1995-1998)</td>
<td>+23.3 (national average +6.0)</td>
</tr>
<tr>
<td>Real Output (billion Euros)</td>
<td>2.45</td>
</tr>
<tr>
<td>Growth in Output (1995-1998)</td>
<td>+92 national average (+25.6)</td>
</tr>
<tr>
<td>Output per employee (Euros)</td>
<td>320000</td>
</tr>
<tr>
<td>Percentage growth in output per employee</td>
<td>+50</td>
</tr>
</tbody>
</table>


Alongside the ‘hard’ economic indicators, the cluster has achieved considerable success in transforming an agglomeration of disconnected firms into a more integrated system able to bundle competencies and resources (Todtling and Trippl...
The cluster initiative appears to have countered the ‘fragmentation’ trap which prevented the region’s sector from utilising its shared competences and collectively responding to external conditions and challenges. Through the operation of forums, networks, conferences and workshops and the important multi-interest ‘advisory group’ the cluster has increased cooperative relations, trust and joined-up approaches to challenges and opportunities. Through the work of the Clusterbeirat in particular, the cluster has developed a collective identity whereby the emphasis shifts from individual firms to the system level (Todtling and Trippl 2004).

In terms of innovation, whilst the linkages between firms in the cluster remain limited (95% of output being exported) more than 58% of firms in the cluster state that they regularly collaborate with universities and other R&D institutions. The cluster benefits from its insertion into the region’s rich innovation system (Figure 3.33), offering access to international automotive research competences and applied education and skills infrastructures. In particular the automotive cluster connects with two federally sponsored ‘Competence Centres’ (initiatives to develop industry led R&D with universities) and four Christian Doppler laboratories (designed to promote more focused bilateral partnerships between firms and universities). The ‘Competence Centres’ in particular have fostered important inter-firm R&D collaborations that represent a clear departure from the sector’s former atomised industrial structure.

**Figure 3.33: The Regional Innovation System in Styria**

<table>
<thead>
<tr>
<th>Contract research</th>
<th>Science/university education</th>
<th>Technical colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joanneum Research</td>
<td>Technical University Graz, Karl Franzens University Graz, University Leoben</td>
<td>Technikum Joanneum, WIF Steiermark: 22 degree programmes, including</td>
</tr>
<tr>
<td>Sustainability and environment</td>
<td>Architecture, construction engineering, machinery, electrical engineering, natural sciences</td>
<td>Design</td>
</tr>
<tr>
<td>Electronics and sensor technology</td>
<td>Law, social sciences/economics, medicine, humanities, natural sciences</td>
<td>Automotive technologies</td>
</tr>
<tr>
<td>Materials and processing</td>
<td>Mining, materials</td>
<td>Information management</td>
</tr>
<tr>
<td>Economy and technology</td>
<td>Companies</td>
<td>Industrial electronics</td>
</tr>
<tr>
<td>Medical technology</td>
<td>Cluster structures</td>
<td>Business administration</td>
</tr>
<tr>
<td>Co-operative R&amp;D institutions at universities</td>
<td>Automobile</td>
<td>Vocational training</td>
</tr>
<tr>
<td>15 Christian Doppler Laboratories</td>
<td></td>
<td>WIF, BHT, HTL</td>
</tr>
<tr>
<td>Competence Centres</td>
<td>Metal and machine building</td>
<td>Very broad range of training programmes in business administration and technology</td>
</tr>
<tr>
<td>Materials Centre Leoben</td>
<td>Wood/paper</td>
<td></td>
</tr>
<tr>
<td>Polymer Competence Centre</td>
<td>Chemistry/phyarmacology</td>
<td></td>
</tr>
<tr>
<td>Knowledge Management Centre</td>
<td>Information technology</td>
<td></td>
</tr>
<tr>
<td>Centre of Competence in Applied Biocatalysis</td>
<td></td>
<td></td>
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<tr>
<td>Austrian Bioenergy Centre</td>
<td></td>
<td></td>
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<tr>
<td>Virtual Vehicle</td>
<td></td>
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<tr>
<td>Competence Centre for Timber Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acoustic Competence Centre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence Centre for Interactive e-business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology transfer/consultancy</td>
<td>Technology transfer/consultancy</td>
<td>Public support/finances</td>
</tr>
<tr>
<td>Liaison offices of the universities</td>
<td>Three technology centres</td>
<td>SFG, Innova</td>
</tr>
<tr>
<td>TTZ Leoben</td>
<td>Several incubation centres (two of them for academic spin-offs)</td>
<td>Subsidies</td>
</tr>
<tr>
<td>Agiplan, Trigon and other consulting firms</td>
<td>‘Wirtschaftspark Obersteirmark’ as network</td>
<td>Finance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regional development policy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Technology policy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster policy</td>
</tr>
</tbody>
</table>

Source: Todtling and Trippl (2004 p.1180)

In sum, the ACStyria initiative has proven successful in its operational context, but the performance of the cluster can not be separated from the role of the broader
ACStyria is now in its tenth year of operation and remains within SFG’s cluster programme along with the wood based cluster (HCStyria), materials cluster and new initiatives around Environmental Technologies, Nanotechnology and Pharmaceuticals. SFG’s economic development strategy remains geared towards sectoral development, with a new overarching approach to regional sectoral ‘strength fields’. The new strength fields concept connects to specific clusters but also networks industrial and research activities that sit outside the existing clusters. SFGs ‘strength fields’ approach includes ‘existing’ as well as ‘future’ regional competences.

**Lessons**

The Styrian experience suggests a number of issues for North East England:

- Old Industrial Regions can achieve recovery through existing sectoral strengths.; this requires moving activities up the value chain and linking activities to innovation, research and renewal.
- Cluster approaches can provide the mechanisms for industrial renewal and transformation by fostering collective and responsive adaptation to new and changing external environments. They are characterised by system level approaches rather than firm based approaches.
- In old industrial regions the adoption of cluster and sector based developments require public authorities to shift from direct intervention mechanisms towards ‘facilitators’ of system level integration of key actors, networks, collective identity, etc. (Todtling and Trippl 2004)
- AC Styria provides an example of a business led organisation, which whilst under the guidance of the public sector, operates as a self financed industry body. This has proven successful in creating a true interface for firms, especially by identifying and resolving bottle necks and challenges within the business world.
- Styria’s regional innovation system provides a research and educational infrastructure upon which sectors and clusters can access internationally renowned expertise and competences. In so doing, the infrastructure attracts significant levels of international investment through Multinational Corporations. In other words, international investment can be attracted to old industrial regions through skills, research and technology led growth.
- Styria has developed a culture of vocational education, training and applied research. Drawing down resources from Lander and Federal Government, Styria has successfully aligned business support to the needs of industry.
- AC Styria has successfully self-promoted itself into being an international ‘best practice’ cluster and automotive centre.
Key References


**Tampere, Finland**

**Population:**
- Tampere region: 460,500 (approx. 9% of Finland’s population)
- Tampere city-region: 311,818 (Finland’s second largest)
- Tampere city: 204,337

**GDP (‘v’ national):**
- Tampere region: GRP per capita 22,069 Euro, 6th highest in Finland (2002)
- Tampere city-region: GRP per capita 24,397 Euro;
- GRP Index: Tampere city-region 106.3, Finland 101.8; EU15 100.

**Unemployment rate (‘v’ national):**
- Tampere region: 10.7%; Finland 8.4% (2005)
- Tampere city-region: 12.9%; Finland 11.9 % (2003)
- Tampere city: 13.6%; Finland 11.1% (2004)

**Sectoral Structure:**
- Tampere city-region employment structure:
  - 0.9% primary; 30.5% secondary; 67.2% tertiary (2002)

**R&D - % of employment (‘v’ national):**
- Tampere city-region % of workforce: 4.6%; Finland % of workforce: 3.1%

**R&D expenditure (‘v’ national):**
- Tampere city-region Euro 734.3 million; 14.7% of Finland total (2003)

**Economic History**

Tampere is the traditional industrial heartland of Finland. Emergent with mill-based activities during the 19th century, Tampere began to experience significant growth within metal and mechanical engineering industries prior to WWII. In the early-post war period Tampere witnessed several decades of high-growth, high-volume industrial activity. A key driver of Tampere’s post-war industrial base were the war reparations directed to the Soviet Union, especially in supporting the metal and engineering sectors. During this period the metals industry employed 27% of the Tampere workforce and superseded the historical dominance of textiles activities in the region’s economy.

Tampere’s post-war growth model peaked in 1960 when over half of all workplaces within the city were based upon industrial activities (33,000 jobs). From the early 1960s the city began to witness an acceleration in the decline and restructuring of its industrial structure. From the 1960s to the early 1990s Tampere’s industrial base experienced considerable pressures for contraction, especially around the
rationalisation of the former labour-intensive model of industrial production. With new low-cost competition emerging within the global economy, textile and associated industries were hit particularly hard. Between 1956 and 1988 employment within the textiles, clothing, footwear and leather industries was reduced from 18,000 to just 3,900 jobs. However, whilst partially softened by the rise of the service economy, the region’s ‘smoke-stack’ industries continued to provide the basis for Tampere’s economic development until the Finnish recession of the early 1990s.

The major upheavals in Eastern Europe during the late 1980s and early 1990s decimated the former markets provided by the Soviet Union. Coupled with a domestic bank crisis, Finland entered into a deep-seated recession between 1991-1994. For Tampere, the recession manifested itself in spiralling levels of unemployment, persistently above 10% and twice reaching annual rates as high as 20%. Between 1990 and 1993 the employment base contracted by around 27,000 jobs (from 129,197 to 102,353 jobs).

From 1994 onwards Tampere experienced a ‘step change’ in economic performance. Two specific drivers of growth are identified. First, the city-region witnessed a modernisation and renewal of its engineering base. The recession acted as a catalyst for the restructuring of the engineering base towards competitive advantages drawn from specialisation, technological sophistication and high-skilled labour. Through the adoption of incremental innovations - benefiting from the city’s educational and research infrastructure - Tampere developed over a dozen global leaders in specialist niche engineering markets. Supported by concentrations of sub-contractors and parts providers, Tampere possesses global leaders in process automation machinery and mobile working machines (e.g. cargo handling equipment and forestry machinery). Reflecting this success, many of Tampere’s specialist companies have been subsumed into the ownership of international corporations. Even so, the skills, expertise and research base of the region continue to provide a geographical anchor for the multinational corporations. Currently, the mechanical engineering and automation industry employ almost 17,000 people in the Tampere region providing an annual turnover in excess of €2 billion (Martinez-Vela and Viljamaa 2004).

Second, new and rapidly expanding business sectors have emerged within post-recession Tampere. By 2000 the ICT sector employed approximately 10,000 people, and if the media and new media-subs sectors and related activates are included employment rises to 15,500 (Sotarausta and Srinivas 2006). The Nokia Group alone employs almost 4,000 workers, mostly within R&D related activities. Alongside the growth in ICT, new activities around health, biotechnology and knowledge intensive services have illustrated Tampere’s new position of high technology and knowledge based activities. Evidence suggests that companies belonging to these sectors are attracted and supported by Tampere’s education, research and technological support structure (Sotarausta and Srinivas 2006; CRITICAL 2006). By 2000, and indicative of the long-term reorientation of the region’s economy, there were more university students in Tampere (25,000) than industrial jobs (22,000).

“In the span of 40 years, Tampere has transformed from the leading town of industrialised Finland into one of the foremost Finnish cities of the knowledge economy” (Kostianinen and Sotarausta 2003, p.1).
Recent Economic Change

Emerging from the deep recession of the early 1990s, Tampere has established itself as one of the fastest growing regions in Finland. In just under a decade, from the end of the recession in 1994 to 2002, employment grew by over 38,000 jobs in the city region (Statistics Finland 2004). In 2003 Tampere city’s employment growth was the fourth fastest of all major Finnish cities, reflecting a 5 year increase of 3,500 jobs.

Over the last decade employment growth has been concentrated in several key sectors, especially knowledge intensive activities (Figure 3.34). Tampere’s knowledge intensive business services sector employs around 19,000 employees in industries such as software and computer services, technical services, management consultancy, and R&D services. Similarly, the ICT sector more than doubled its size in less than five years. In 1996 there were a total of 170 ICT firms, employing 5,200 people, with total output of 4,590 million FIM (772 million Euros). Employment increased in private firms from 3,000 in 1994 to 6,750 in 1997; an increase of 125.2 per cent. By 2000, the ICT sector employed approximately 10,000 people.

Figure 3.34 Employment by industry in the Tampere city-region, 1990-2002

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<tbody>
<tr>
<td>Agriculture, Forestry &amp; Fishing</td>
<td>2697</td>
<td>21.1</td>
<td>1590</td>
<td>15.5</td>
<td>1235</td>
</tr>
<tr>
<td>Mining</td>
<td>37</td>
<td>0.6</td>
<td>65</td>
<td>1.1</td>
<td>77</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>33334</td>
<td>26.2</td>
<td>27581</td>
<td>27.5</td>
<td>32528</td>
</tr>
<tr>
<td>Electricity, Gas, Water</td>
<td>1222</td>
<td>0.9</td>
<td>1972</td>
<td>1.9</td>
<td>905</td>
</tr>
<tr>
<td>Building &amp; Construction</td>
<td>10118</td>
<td>7.6</td>
<td>6156</td>
<td>5.6</td>
<td>8200</td>
</tr>
<tr>
<td>Wholesale &amp; Retail Trade, Hotels &amp; Restaurants</td>
<td>29111</td>
<td>16.2</td>
<td>15162</td>
<td>14.6</td>
<td>20901</td>
</tr>
<tr>
<td>Transport, Communication &amp; Storage</td>
<td>3059</td>
<td>6.2</td>
<td>7414</td>
<td>6.7</td>
<td>9223</td>
</tr>
<tr>
<td>Finance &amp; Insurance, Business Services</td>
<td>9276</td>
<td>7.2</td>
<td>11319</td>
<td>12.2</td>
<td>11803</td>
</tr>
<tr>
<td>Public Services &amp; Administration</td>
<td>40236</td>
<td>31.2</td>
<td>33467</td>
<td>30.3</td>
<td>41401</td>
</tr>
<tr>
<td>Other</td>
<td>1788</td>
<td>2.2</td>
<td>2077</td>
<td>2.7</td>
<td>1067</td>
</tr>
<tr>
<td>Total</td>
<td>119197</td>
<td>100</td>
<td>110546</td>
<td>100</td>
<td>135255</td>
</tr>
</tbody>
</table>


Despite the relative decline of several traditional sub-sectors, the level of manufacturing employment in 2002 (32,956) exceeded that of the mid 1990s. The metal products and machine building sectors are at the centre of the new manufacturing economy of Tampere, providing 26 per cent of manufacturing employment (9,800 employees). The pulp and paper industry (11%) and the electronics industry (9%) continue to represent stable forms of employment within the manufacturing workforce. However, the once predominant textile, clothing, leather and shoe industries now serve to only employ 4% of the manufacturing workforce.

In terms of productivity and economic performance, from the late 1990s the Tampere region (and to a slightly lesser degree Tampere city) witnessed high levels of continued growth in regional GVA per capita (Figure 3.35). Outside of the Helsinki region, Tampere outperforms other comparator Finnish regions in both the
level of GVA and year on year growth. By 1999 the Tampere city-region exceeded
the national average for Gross Regional Product per capita and in 2002 the broader
Tampere region produced the 6th highest GRP in Finland.

Figure 3.35: Gross Value Added by sub-regional unit 1996-2003

In 2000 total industrial production reached record levels in Tampere city region and
since the late 1990s the proportion of industrial turnover derived from exports has
continued to exceed 60% (Figure 3.36).

Figure 3.36: Industry turnover and exports in the Tampere city-region 1995-
2002

Tampere’s recent growth within knowledge intensive sectors of the economy
reflects its position as Finland’s second centre of R&D behind Helsinki (Figure
3.37). Between 1995 and 1999, the growth of R&D investments by real annual
change was 25% compared to the national average of 14%. This growth has been
particularly strong in the business sector that represents about 75% of all R&D
spending in the city-region. Also the share of R&D personnel of the workforce is
high, 4.6% in comparison with the national average of 3.1%. In terms of outputs, 287 patent applications were submitted from Tampere in 1999 - 15.5% of national patenting activity (CRITICAL 2006).

Figure 3.37: Top 5 largest sub-regional units by R&D expenditure in 2002 and 2003

<table>
<thead>
<tr>
<th>Sub-regional unit</th>
<th>R&amp;D expenditure in 2002</th>
<th>R&amp;D expenditure in 2003</th>
<th>Real* annual change of R&amp;D expenditure 2002-2003</th>
<th>R&amp;D exp. per inhabitant 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Share of R&amp;D exp.</td>
<td>Business enterprises' share</td>
<td>Total</td>
</tr>
<tr>
<td>Helsinki</td>
<td>€ 2,112.3</td>
<td>43.7%</td>
<td>67</td>
<td>€ 2,112.7</td>
</tr>
<tr>
<td>Tampere</td>
<td>€ 619.9</td>
<td>12.8%</td>
<td>73</td>
<td>€ 734.3</td>
</tr>
<tr>
<td>Oulu</td>
<td>€ 528.9</td>
<td>11.0%</td>
<td>76</td>
<td>€ 639.2</td>
</tr>
<tr>
<td>Turku</td>
<td>€ 354.5</td>
<td>7.3%</td>
<td>61</td>
<td>€ 295.3</td>
</tr>
<tr>
<td>Salo</td>
<td>€ 234.9</td>
<td>4.9%</td>
<td>100</td>
<td>€ 222.0</td>
</tr>
<tr>
<td>Whole country</td>
<td>€ 4,830.3</td>
<td>100.0%</td>
<td>70</td>
<td>€ 5,005.0</td>
</tr>
</tbody>
</table>

Although Tampere has experienced rapid rates of growth in recent years, unemployment rates still exceed the national average. During the economic recession of the early 1990s, unemployment rates at both region and city-region level exceeded 20%. However, between 1993 and 2003, Tampere city-region unemployment has halved (Figure 3.38). Indicative of structural unemployment following industrial change, 25% of the city-region’s unemployed are long-term and the majority of whom (60%) are aged over 60 years.

Figure 3.38: Unemployment rates in Tampere city-region, Tampere region and Finland in years 1990-2003

<table>
<thead>
<tr>
<th>Year</th>
<th>Tampere city-region</th>
<th>Tampere Region</th>
<th>Finland</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>6.6</td>
<td>6.6</td>
<td>5.7</td>
</tr>
<tr>
<td>1991</td>
<td>14.6</td>
<td>14.2</td>
<td>12.2</td>
</tr>
<tr>
<td>1992</td>
<td>19.9</td>
<td>19.6</td>
<td>18.0</td>
</tr>
<tr>
<td>1993</td>
<td>24.2</td>
<td>23.7</td>
<td>22.2</td>
</tr>
<tr>
<td>1994</td>
<td>21.7</td>
<td>21.2</td>
<td>20.4</td>
</tr>
<tr>
<td>1995</td>
<td>20.1</td>
<td>20.0</td>
<td>18.8</td>
</tr>
<tr>
<td>1996</td>
<td>20.2</td>
<td>20.3</td>
<td>19.3</td>
</tr>
<tr>
<td>1997</td>
<td>17.4</td>
<td>17.4</td>
<td>16.8</td>
</tr>
<tr>
<td>1998</td>
<td>15.2</td>
<td>15.4</td>
<td>14.9</td>
</tr>
<tr>
<td>1999</td>
<td>14.5</td>
<td>14.7</td>
<td>14.0</td>
</tr>
<tr>
<td>2000</td>
<td>12.9</td>
<td>13.3</td>
<td>12.5</td>
</tr>
<tr>
<td>2001</td>
<td>12.7</td>
<td>13.1</td>
<td>12.7</td>
</tr>
<tr>
<td>2002</td>
<td>12.5</td>
<td>12.7</td>
<td>12.7</td>
</tr>
<tr>
<td>2003</td>
<td>12.9</td>
<td>13.1</td>
<td>12.9</td>
</tr>
</tbody>
</table>

Source: Statistics Finland

Interventions

The Tampere Region Centre for Expertise Programme (TRCE) was the central policy intervention operating during the city-region’s step-change recovery in the late 1990s. The TRCE programme is situated within the national Centre of Expertise Programme. Launched in 1994, the national Centre of Expertise Programme operates to allocate funding and strategic status to localities which
represent centres of internationally competitive business and research within selected fields. Following several funding rounds, the most recent initiative is a fixed term programme culminating in 2006 and serves as a special programme in accordance with central governments Regional Development Act.

During the life-span of the Centre of Expertise Programme, Tampere has achieved and sustained Centre for Expertise status in Mechanical Engineering and Automation; ICTs, Health and Biotechnology; Digital and Media and more recently Knowledge Intensive Business Services. In so doing the TRCE, through the provision and coordination of business support systems, has provided important platforms for business growth and innovation. Unlike previous forms of Finnish regional policy, the Centre for Expertise programme aimed to identify and strengthen regional strengths rather than address regional weaknesses. Regions were required to competitively bid for Centre for Expertise status by illustrating the potential and resources to sustain progressive collaborations between firms, universities and research institutions within the specific field of activity. Tampere’s success in both attaining and implementing Centre for Expertise status across five fields of activity in part reflects the region’s long-term experience of cooperation between the fields of research and business supported by a high quality research and education network. Moreover, the seeds of Tampere’s recent ‘step change’ towards knowledge intensive activities were planted by a series of incremental interventions spanning the previous 4 decades.

During the early 1960s a series of sustained, vigorous and far-sighted political actions by the city council led to the relocation of two universities from Helsinki to create the new universities of Tampere (UTA) and the Tampere University of Technology (TUT). From the outset both universities have been ‘outward facing’, developing important research and education linkages with the local economy. For example, despite initial national level opposition to its self-defined role as a ‘university of industry’, the TUT’s research, skills and training provision have been vital to the metal and mechanical engineering sector’s renewal and emergent global competitiveness. In parallel, the UTA’s visionary decision to appoint the first Nordic Chair of Computing Sciences in the 1960s was crucial in developing a regional expertise which would eventually draw Nokia to Tampere in the late 1980s leading to 4,000 direct R&D jobs.

Two key points emerge from this context. First, Tampere has placed a considerable emphasis in developing a strong educational and research base, often around far-sighted fields of expertise. For example, by creating the Chair in Computing Sciences, some three decades later the city has established a core strength whereby over a third of all degrees in IT within Finland are from the TUT alone. Second, Tampere’s universities and industry research centres (e.g. Technical Research Centre for Industrial Systems) have developed a culture of applied research and ‘effective’ collaboration with industry. The success of Tampere’s science park initiative, Hermia, reflects this dimension. Founded in 1986, and located adjacent to the site of the TUT, Hermia has expanded to house over 145 companies and a workforce of 3000. Important linkages between TUT and Hermia companies are facilitated through Tamlink Ltd, an organisation formed to promote product development cooperation.

Within this longer-term context, the Centre for Expertise Programme focused and strengthened the established and emerging sectoral and research strengths of post-recession Tampere. A National Committee appointed by the Ministry of the
Interior leads the Centre for Expertise programme across Finland. By 2006, 22 centres of expertise were in operation covering 45 fields of expertise. During the funding round 2003-2006, €9 million of central government funds were allocated to region councils to develop centres of expertise. The Tampere region received €770,000 of funding which is provided to coordinate programmes, prepare projects and provide seed-funding for pilot projects. Core funding was provided by local actors such as the Council of Tampere Region, the City Council and Employment and Economic Development Centre. Whilst the small amount of central funding was not particularly significant in driving Tampere sectors forward, the programme provided a ‘strategic status’ to the economic fields chosen. Crucially, the programme reflected Tampere’s first prioritisation and targeting of specific sectors within policy development, and therefore provided a new vehicle to strategically coordinate the energies and activities of key actors.

The TRCE was designed to operate through a series of specialist organisations, companies limited by guarantee, each focused upon the specific field of expertise (Figure 3.39). Each specialist organisation began with a full-time leader who was responsible for the development and delivery of strategies and objectives. The strategies and objectives for each specific centre were developed through a nominated group of experts and stakeholders. The overall operational delivery of the programme was undertaken by the city’s Technology Centre, acting as budget holder and coordinator of the activities of the specialist organisations. At the programme level, a management board - including representatives from the local authorities, businesses and funders – oversaw the programme’s budget, initiation of new projects and monitoring of the programme.

**Figure 3.39: The organisational structure of the Tampere Region Centre of Expertise Programme**

![Tampere Region Centre of Expertise Programme Organisation Diagram]

Figure 3.40 illustrates the activities and services provided by the programme and their interrelations across the specific fields of expertise. Generic models of support activity were envisaged at the outset of the programme but were subsequently specialised by the dedicated organisation operating in each field of expertise.
Figure 3.40: The fields of operation and activities of the Tampere Region Centre of Expertise Programme

The Centre of Expertise are listed below:

- **Finn-Medi Research Ltd** coordinates the *Health Care and Biotechnology* centre for expertise. The organisation operates as a development company offering services for commercialisation, R&D support and technology transfer and financing. The organisation existed prior to the Centre for Expertise programme but incorporated the management of the programme. In 2002 an evaluation by the Ministry of the Interior highlighted the success of the centre for expertise, especially in terms of activities to promote internationalisation (EU services and technology transfer), business development and ‘active communications’ in fostering effective forums and networks. Between 1995 and 2003 the number of jobs in this field increased by 15% p.a. reflecting over €160 million private sector investment (Finn-Medi 2003). In association with the Centre for Expertise programme Finn-Medi has also developed a physical ‘campus’ infrastructure that houses research organisations, a university hospital and provides over 12,000 jobs.

- In advance of the culmination of the Centre for Expertise programme, Finn-Medi is at the centre of a parallel and ultimately successor initiative: BioneXt Tampere. Launched in 2002 the new initiative focuses upon the research, product development, clinical application and international commercialisation of biotechnology. The programme aims to achieve a project portfolio with at total value of 100 million euro by 2010 for research, education, product development, equipment, and business premises. The programme promotes cooperation between different scientific fields and multidisciplinary stakeholders.

- **Media Tampere** coordinates the *digital media sector*. Established in 1999, the organisation is co-owned by member companies, TUT and city-council. The organisation is tasked with establishing projects and facilitating cooperation between members, including initiatives such as the Media Club incubator. Media Tampere has also instigated a number of projects aimed at
promoting internationalisation and engaging in the modernisation of the public sector.

- **Tampere Technology Centre** coordinates the *Mechanical Engineering and Automation* field of expertise. The project’s objectives have been to preserve employment levels, develop more effective supply networks and instigate developmental projects such as a Foundry Institute. More recently the activities of the centre have shifted towards foresight activities and skills development.

- **Tampere Technology Centre** also coordinates the *Information and Communication Technologies* centre of expertise. The activities of the centre have recently been overshadowed by the eTampere project. eTampere is a 5 year programme with a budget of 130 million euro to make Tampere a global leader in the information society. eAccelerator represents an eTampere project and aims to accelerate the growth of 20 companies to become global leaders, through business development and venture capital

- **Professia Ltd** coordinates the *Knowledge Intensive Business* centre of expertise. The organisation is owned by a series of local public sector bodies and provides a variety of consultancy services to businesses.

In 2006 the Centre for Expertise Programme is due for completion and debates surround its future. In Tampere, the TRCE programme has received several national commendations including the best performing regional centre in Finland during 2002. Early evaluations of the programme highlighted the success of close relations with the TUT, the key roles played by large anchor firms and the business support infrastructure available to SMEs. By 2005, economic performance indicators demonstrated the significant growth of the sectors involved with the TRCE programme (Figure 3.41).

**Figure 3.41: Indicators of Economic Performance during the Fields of Expertise Programme**

<table>
<thead>
<tr>
<th>Field of Expertise</th>
<th>Turnover</th>
<th>Share of Exports</th>
<th>Employment</th>
<th>Annual growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical Engineering and Automation</td>
<td>2.8 billion Euro</td>
<td>Over 50%</td>
<td>25,500</td>
<td>3-5%</td>
</tr>
<tr>
<td>ICT</td>
<td>3.9 billion Euro</td>
<td>60-70%</td>
<td>10,000</td>
<td>30%</td>
</tr>
<tr>
<td>Health Technology</td>
<td>150 million Euro</td>
<td>85%</td>
<td>12,000*</td>
<td>15%</td>
</tr>
<tr>
<td>Media Services</td>
<td>950 million Euro</td>
<td>5%</td>
<td>5,500</td>
<td>25%</td>
</tr>
</tbody>
</table>

*Includes public services

Source: Centre of Expertise Programme (2006)
Over the life course of the Centre for Expertise programme in Tampere (10 years) it is possible to identify specific shifts in focus and activities, responding to the maturing of the programme and its target sectors (Figure 3.42). At the outset an expert council of stakeholders was formed to provide the strategic direction for the programme. The second stage involved the activities of full-time ‘middle-men’ tasked with brokering linkages and intelligence between firms and support institutions. A variety of tools were used (forums; meetings etc.) with varying degrees of success. Third, whilst it was identified that existing firms were well served by funding streams, action was taken to improve financial support for new ventures through seed funding. Although funding schemes were realigned and new initiatives developed, the boom in the ICT industry partially obscured the depth of problem. Fourth, the programme connected with the cluster concept and this enabled a broader engagement with firms and activities beyond the immediate sphere of the chosen sector (e.g. customers; suppliers). The programme’s engagement with the cluster concept proved to be an important steer for its future trajectory. Fifth, each cluster engaged in marketing and promotion activities to increase awareness and participation in their activities. Newsletters, web portals and marketing brands were mobilised. Sixth, the programme recognised the importance of developing, sharing and utilising intelligence on the major future trends facing each cluster through Foresight activities. Triggered in part by the downturn of the ICT boom, a variety of foresight tools and mechanisms were activated. Finally, the programme increasingly adopted an international focus, both in terms of attracting FDI to enhance the clusters and developing international research linkages, benchmarking activities etc. In essence, the programme became more outward looking.

Figure 3.42: Stylized path of development of Tampere Region Centre of Expertise Programme from the learning perspective
Lessons

The Tampere experience suggests a number of lessons for the North East:

- Tampere provides an example of an old industrial region which has both renewed existing sectoral strengths and developed new areas of expertise through a knowledge led growth model.

- The recent success of the Centre for Expertise Programme can not be understood without an appreciation of the longer-term development of a regional innovation system based around applied research and industry – academic collaboration. In particular the vocational and applied focus of Tampere’s ‘technical’ university has proven critical in renewing the industrial base. Concurrently, a long-term culture of university – business interaction and engagement has been fostered.

- In linking the longer-term development of Tampere’s knowledge base to contemporary events the case study illustrates the importance of long-term investments within educational and research competences. In particular, visionary and far-sighted actions have developed important platforms for adaptable and high value growth.

- The potentially important role played by specialised quasi-autonomous sectoral/cluster bodies. Such bodies appear sufficiently distant from public ownership to offer legitimacy with the business sector.

- The Centre of Expertise programme illustrates the importance of assigning ‘strategic’ significance to regional strengths, both nationally and regionally. The importance attached to each targeted ‘field’ provided the basis for focused constructive collaboration.

- Tampere restates the key role of a high-skilled workforce and regional research competences in attracting and nurturing opportunities for new dimensions of economic growth.

- The Tampere case provides a very clear example of the importance of developing R&D capacity within city-regions and regions. In particular, the acceleration in business related R&D illustrates the importance of initial public sector R&D in establishing niches, trajectories etc.

- The Centre for Expertise programme provides an important example of multi-level governance whereby national, regional and sub-regional bodies are aligned in the pursuit of a focused strategy and programme. The programme retained significant scope for regional level autonomy in targeting and supporting specific sectors.

- Successor strategies are being developed within Tampere prior to and in parallel with the culmination of the programme, and indicative of a continued and ambitious set of regional and local policy strategies.
Key References


Centres of Expertise Programme (http://www.oske.net)
City of Tampere Council (http://www.tampere.fi/)
Council of Tampere Region (http://www.pirkanmaa.fi/english/)
Tampere International Business Office (http://www.professia.fi/investintampere/)
ANNEX 3: THE NORTH EAST OF ENGLAND: A CASE STUDY IN REGIONAL DEVELOPMENT

**Population:**
2,539,400 (mid-2003); 5% of England’s population
North East: 1981-2001, overall decline by 2%

**GVA (‘v’ national):**
North East Regional GVA: £32.3 billion (3.4% of UK GVA)
North East Regional GVA per capita: £12,736 (20% below national average; second lowest UK regional rate)

**Employment rate:**
Working age employment rate: North East 70.3%; England 74.5% (Jan 2006) (NERIP 2006)

**Unemployment rate (‘v’ national):**
North East 7%; UK 5.1% (Jan 2006) (NERIP 2006)

**Business stock (‘v’ national):**
32,000 VAT registered businesses per 10,000 population (42% below the UK average; lowest of all UK regions)

**Sectoral Structure: (% of workforce)**
Primary: 2.2%; Secondary: 23.6%; Tertiary 74.2%
(LFS- 2004-2005)

**R&D expenditure (‘v’ national):**
0.9% of GVA (2002- lowest of all English regions)

*Unless stated, all statistics are drawn from the State of the Region report (2006)*
An Economic History of the North East

North East England is a classical example of an industrial region which experienced large scale social and economic change in the final decades of the 20th century. The region is now struggling with the legacy of the long-run economic decline of its traditional industries, branch plant economy tradition, weak service sector and limited local and regional institutions.

The North East: from historical powerhouse to de-industrialisation

The North East was amongst the first regions to industrialise during the 19th Century, experiencing rapid growth through ‘carboniferous capitalism’. This closely interlocked cluster of industries comprised coalmining, iron and (later) steel making, shipbuilding, and heavy engineering, was underpinned by a local banking sector, and grew to serve the markets of the expanding British Empire. In the first decade of the 20th century, fully one quarter of the global output of the shipbuilding industry was produced on the banks of the region’s three principal rivers, the Tyne, Wear and Tees (Hudson, 1989).

By the end of the 19th century, however, there was evidence that the region’s key industries were losing their competitiveness in the face of declining productivity levels, technological changes and new international forms of competition. Control of the banking sector in the North East began to move out of the region to London, integrating with the capital markets in the City and loosening its links with local and regional industries. During the period between the First and Second World Wars the weakness of the North East's industrial base became apparent. Within the context of a global depression, collapsing markets for coal and ships in particular led to the emergence of mass unemployment and social conflict. The North East became defined as a ‘problem region’.

It was the onset of the Second World War which proved the region’s saviour as the demand for coal, ships and armaments increased and was sustained into the 1950s. The ownership structure of industry changed during this period under an interventionist national government. Coal-mining, steel and shipbuilding industries were all - at varying times - taken into state control, rendering the North East a ‘state managed region’ (Hudson, 1989). Waves of merger and acquisition activities saw control of local industries shift out of the region, usually to London, southern England or beyond (Pike, 2005). From the 1960s onward, though, the pace of restructuring quickened. Tens of thousands of jobs were lost in the coal mining, steel-making, shipbuilding and engineering sectors in the last quarter of the twentieth century resulting from the interaction of market forces, state policies and privatisation. The final run-down of many of the declining sectors during the 1980s and 1990s created devastating and long-lasting impacts for host communities (e.g. Hudson, 1989; Tomaney, et al, 1999).

Processes of growth: inward investment and services

The impacts of long-run contraction in the North East’s industrial base have been offset by two processes: inward investment and service-sector growth. First, during the 1960s and 1970s, successive national governments exercised an extensive regional policy seeking the geographical redistribution of growth through both restrictions on development in fast growing areas and incentives for firms to invest in designated ‘development areas’. With relatively high rates of unemployment swelling the labour pool and depressing wage levels, exogenous development was
sought as the North East became a focus for mobile forms of manufacturing investment, especially for labour intensive activities owned by UK and US companies.

From the 1960’s through to the late 1990s inward investment has been the main industrial policy instrument for local and regional development in the North East. Using an array of national and regional incentives along with the ‘open door’ regulatory policy of successive national governments, investment was made relatively easier and less costly than in comparative economies in continental Europe. In 1979, 1990 and 1994 foreign owned plants in the North East and Cumbria represented 11.8 per cent, 18.3 per cent and 23 per cent of manufacturing employment creation respectively (Loewendahl 2003). The Northern region has consistently received a disproportionate share of national inward investment, which from the mid 1980’s to the early 1990’s provided over 16,000 new jobs and £1.3 billion of new investment (Hill and Munday 1992). With the exception of 1985, over 2,000 new jobs were created by inward investment each year within the North East.

While FDI policy has made the region attractive to major international investors such as Black and Decker, Nissan, Siemens and Fujitsu, much of the region’s manufacturing employment has also become vulnerable to rationalisation. Large investors, such as Siemens, have opened and closed major factories within a short space of time when confronted with sharp and unexpected deteriorations in product market conditions (Dawley in press). Indeed, not only has the North East witnessed the fragility and volatility of FDI-led models of growth, but surveys of local linkages have shown that despite processes of externalization, branch plants in the North East are poorly integrated into the regional economy, reflecting the deep functional specialisation and integration of the region’s manufacturing industry into an increasingly global spatial division of labour (Loewendahl, 2003; Phelps, 1993). Similarly, there is little evidence that FDI has stimulated the development of private sector R&D in the region (Loewendahl, 2003), which continues to perform poorly relative to the rest of the UK (HM Treasury, 2001).

Consequently, the North East can be viewed as a classic ‘branch plant economy’ whose competitiveness has been eroded with cost-sensitive and often labour intensive manufacturing, and increasingly service-oriented investments, seeking new locations such as Central and Eastern Europe and China, India and other parts of Asia. Nevertheless, despite the shrinkage of the manufacturing base, the North East continues to derive a higher proportion of its GDP than most UK regions from manufacturing output with employment concentrated in externally-owned firms (Jones and Wren, 2004).

Alongside the restructuring of manufacturing, the region has benefited from the general growth of service industries across the UK and which have emerged as the dominant source of employment. Within the region, much service growth has rested disproportionately on the expansion of the public sector. From the 1970s onwards, successive governments have decentralised civil service ‘back office’ jobs to the North East, while generally retaining higher level occupations in London and the south (Marshall, et al, 2005). In contrast, business services are especially under-represented in the North East. In part, this is a function of the branch plant character of the manufacturing sector, restricting the opportunities for the growth of business services around HQ functions (Marshall, 1982).
Similarly, the growth of financial services has occurred at a lesser rate in Newcastle than other provincial centres such as Leeds, Manchester and Edinburgh, although the North East proved adept at attracting investments in call centres in the late 1990s. Almost 50,000 workers – over 4 per cent of the regional workforce, and twice the national average – were employed in call centres in the North East in 2003 (DTI 2004). Call centre employment, however, has replicated many of the features of the manufacturing branch plant economy providing mainly routine jobs and being only loosely rooted in the region (Richardson, et al. 2000).

The North East Economy Today

Today, the economic base of the region reflects a diverse array of activities and functions (see Figure 4.1). Several sectors have experienced renewal (to varying degrees) with, for example, elements of the engineering industry successfully competing in new product and export markets (and with an element of overlap with the construction sector). The North East’s manufacturing sector continues to rely heavily on process industries and activities, spanning an array of high to low skilled functions including food and drink, chemicals and iron and steel. In the service sector, public services remain a major employer in the region, delivering services to both the regional population and national government and developing a growing array of tradeable service activities. In the private service sector, considerable employment resides within the customer service industries delivering an array of consumer and personal services alongside the continued expansion of the consumer society and tourism. The region is also beginning to demonstrate growth and expansion within high-value added knowledge-based services drawing on the expertise of highly skilled knowledge workers (scientific, technical, business and cultural).

Figure 4.1: Employment by broad industrial sectors (including self-employment)

Whilst new activities are contributing to the recent growth of the region’s economy, in absolute terms the growth is from a lower base and in relative terms still lags the national averages. As such, the region’s place at the bottom of the economic and social hierarchy of UK regions is contested only by Northern Ireland. By the beginning of the 21st century, the North East had the lowest income per head, contained the largest proportion of communities with multiple forms of deprivation, the lowest rates of employment, the lowest levels of educational attainment, the lowest rates of entrepreneurship and, still, the highest rate of unemployment. Unsurprisingly, for the last thirty years of the twentieth century, the region lost population and is predicted to continue to do so (HM Treasury, 2001; Pike et al 2006).

Regional Gross Value Added (GVA)

Between 1990-2000, the North East’s economic performance worsened relative to national levels of GVA per capita, dropping from 85% to 79% of the national average. The decade saw the region experience the lowest rate of growth nationally (see Table 4.1) although growth rates have improved recently, leading to GVA per capita rising to around 80% of the national average (State of the Region, 2006). Compared to national patterns, the North East’s sectoral composition of GVA remains considerably over represented in manufacturing (21% ‘v’ 16%) and public sectors (23% ‘v’ 17%), although the region has demonstrated growth in the contribution made by business services (25% ‘v’ 35%).

Table 4.1: Headline1 gross value added (GVA)2 at current basic prices 1995 to 2001 (£million)

<table>
<thead>
<tr>
<th>Region</th>
<th>Change 1995-2002 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>46.4</td>
</tr>
<tr>
<td>North East</td>
<td>31.6</td>
</tr>
<tr>
<td>North West</td>
<td>38.0</td>
</tr>
<tr>
<td>Yorkshire and the Humber</td>
<td>40.5</td>
</tr>
<tr>
<td>East Midlands</td>
<td>39.3</td>
</tr>
<tr>
<td>West Midlands</td>
<td>38.4</td>
</tr>
<tr>
<td>East of England</td>
<td>44.8</td>
</tr>
<tr>
<td>London</td>
<td>56.5</td>
</tr>
<tr>
<td>South East</td>
<td>55.7</td>
</tr>
<tr>
<td>South West</td>
<td>48.9</td>
</tr>
</tbody>
</table>

Source: Office for National Statistics
http://www.statistics.gov.uk/downloads/theme_economy/NUTS3_Tables_1-12.xls

1 calculated using a five-period moving average.
2 Estimates of workplace based GVA allocate income to the region in which commuters work.

The North East Labour Market

23 As suggested in the State of the Region Report (2006), the unusual and temporary slowing down of growth in the London economy has reduced the national rates of growth in 2003 meaning caution has to be taken when understanding the North East’s relative growth.
Amongst recent signs of improvement, the North East’s labour market continues to perform poorly in relation to other regions in the UK. Withstanding Northern Ireland, the size of the North East region’s labour market is the smallest of all regions in the UK; the population of economically active persons, either in employment or unemployed, currently numbers 1,131,000 (LFS Feb-April, 2004).

The size of the North East’s labour force is also indicative of both demographic and migratory trends. Demographically, the North East’s population has declined by just under 2% over the last two decades. In contrast every English region bar the North West has witnessed population growth and forecasts suggest that the North East will be the only English region to lose population over the next 2 decades. Between 1993 and 2003 outward migration accounted for over 80% of the region’s population decline (State of the Region, 2006). Moreover, an estimated 40% of the region’s population will be aged over 50 by 2013 (One NorthEast, 2006).

Withstanding a 3.5% rise between 1996 and 2004 (see Table 4.2), the North East continues to exhibit the lowest ‘employment rate’ of any English region, with only 69.4% of people of working age actually in work (One NorthEast, 2006; Adams, 2005a). Using 2003 figures the North East needed to increase employment by 100,000 to achieve the then national rate of employment of 75% (Adams 2005b).

Table 4.2: Employment Rates for UK Nations and Regions

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>North East</td>
<td>65.5</td>
<td>67.2</td>
<td>67.6</td>
<td>68.7</td>
<td>68.5</td>
<td>68.2</td>
<td>69.4</td>
</tr>
<tr>
<td>London</td>
<td>67.4</td>
<td>70.3</td>
<td>71.2</td>
<td>71.2</td>
<td>71.1</td>
<td>70.0</td>
<td>70.5</td>
</tr>
<tr>
<td>Wales</td>
<td>65.6</td>
<td>68.5</td>
<td>69.6</td>
<td>68.2</td>
<td>68.6</td>
<td>72.8</td>
<td>72.7</td>
</tr>
<tr>
<td>North West</td>
<td>68.6</td>
<td>70.3</td>
<td>72.6</td>
<td>72.8</td>
<td>71.9</td>
<td>73.5</td>
<td>73.4</td>
</tr>
<tr>
<td>West Midlands</td>
<td>68.9</td>
<td>73.0</td>
<td>73.3</td>
<td>74.3</td>
<td>74.0</td>
<td>74.0</td>
<td>74.0</td>
</tr>
<tr>
<td>Yorkshire and Humberside</td>
<td>70.9</td>
<td>70.7</td>
<td>73.8</td>
<td>73.6</td>
<td>73.0</td>
<td>74.1</td>
<td>74.5</td>
</tr>
<tr>
<td>Scotland</td>
<td>69.0</td>
<td>70.4</td>
<td>72.3</td>
<td>73.7</td>
<td>73.4</td>
<td>74.7</td>
<td>74.5</td>
</tr>
<tr>
<td>East Midlands</td>
<td>73.1</td>
<td>75.4</td>
<td>76.9</td>
<td>75.7</td>
<td>76.5</td>
<td>76.1</td>
<td>76.8</td>
</tr>
<tr>
<td>South East</td>
<td>74.8</td>
<td>77.9</td>
<td>80.5</td>
<td>80.2</td>
<td>79.9</td>
<td>79.3</td>
<td>78.4</td>
</tr>
<tr>
<td>South West</td>
<td>73.1</td>
<td>77.2</td>
<td>78.7</td>
<td>78.9</td>
<td>79.1</td>
<td>78.5</td>
<td>78.8</td>
</tr>
<tr>
<td>East</td>
<td>74.4</td>
<td>75.9</td>
<td>78.2</td>
<td>79.5</td>
<td>79.0</td>
<td>78.5</td>
<td>79.0</td>
</tr>
<tr>
<td>Great Britain</td>
<td>70.5</td>
<td>72.9</td>
<td>74.6</td>
<td>74.8</td>
<td>74.6</td>
<td>74.8</td>
<td>75.0</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>61.6</td>
<td>66.7</td>
<td>65.2</td>
<td>67.3</td>
<td>67.5</td>
<td>69.4</td>
<td>66.6</td>
</tr>
</tbody>
</table>

(Source Adams 2005a Table 3.1 - LFS Time Series Data 2005)

Between 1985-2004, significant reductions in absolute levels of unemployment have been achieved within the region yet the North East retains the highest unemployment rate (5.8% Oct 2005) of any English region (excluding London) (State of the Region Report, 2006; Skills North East 2005). Whilst evidence suggests that the North East’s long-term unemployment rates have declined in line with national rates, the region possesses the highest proportion across the English regions, at 22.6%, of persons of working age in workless households (State of the Region, 2006). Localised concentrations of the region’s workless households are to
be found in deprived ex mining and manufacturing localities (State of the Region, 2006)\textsuperscript{24} and, at nearly 13\%, the North East has the highest regional rate of working age population receiving disability and sickness benefits (and second only to Wales within GB) (Adams, 2005b). Moreover, between 2000 and 2003 the number of people in the region claiming Incapacity Benefit rose from 158,000 to 163,000 (One North East, 2006).

**Sectoral Employment**

Within any regional economy, a critical driver of employment and productivity trends is the relative proportion of different sectors present. In the North East this has led to a recent history of slow employment growth. Between 1982 and 2002 the North East lost 100,000 jobs in manufacturing employment, almost 40\% of the sector. More recently, between 1996 and 2001, the region’s manufacturing workforce reduced by 11.1\%, a rate of loss similar to that witnessed nationally (Stone and Braidford, 2002). Nevertheless, the sector continues to remain more important in the North East than nationally, accounting for 14.4\% of all jobs in 2005, as opposed to 13.4\% across England (see Figure 4.1 above).

In the late 1990s the poor performance of the region’s employment growth (half the national average) reflected the higher rates of job losses in the manufacturing sector than the growth rates in the service sector. In 2001 the gap between the North East and national employment levels was 6.5\%. Over 2000 to 2003, service growth in the North East was twice the national average (10.5\%) leading to an overall employment growth of 5\% (against a national figure of 2\%) (Skills North East, 2005).

From 1996-2001 regional service employment grew by 6.2\% to provide 72\% of jobs within the region. Between 2000 - 2005 the growth rate has reduced slightly, to 4.8\%, but nevertheless is running ahead of national growth rates (3\%). Since 2000 service sector employment growth has been especially pronounced in Transport and Communications; Banking and Insurance, Professional and other related services, IT and Digital, Education and Public Admin. Nevertheless, the region’s overall composition of service employment is disproportionately (above national average) situated in Retail and Distribution; Tourism and Hospitality; Education; Health and Social Care and Public Administration. In contrast, and of particular qualitative importance, employment remains under represented (below national average) in Banking and Insurance; Professional Business Services; Computing and R&D (See Figure 4.1; Skills North East, 2005). In sum, the 2006 State of the Region report highlights the differences in regional rates of employment growth between ‘business services’ and ‘public sector’. Whilst in combination these two aggregate groupings reflect similar proportions of North East employment to those witnessed nationally, when taken individually the North East continues to be disproportionately reliant upon Public Sector employment. It is also the case that in 2003 over 1 in 5 jobs (21.8\%) in the North East region were within the UK’s ten worst performing sectors whilst less than half of jobs (40.7\%) were within the UK’s ten best performing sectors (Skills in England, 2003).

\textsuperscript{24} Worklessness is defined as those people who are unemployed, i.e. people of working age who are looking for a job and are registered, for example JSA, and those people who are economically inactive, i.e. people of working age who are neither working nor looking for work and may be registered, for example, for Incapacity Benefit (SEU/ODPM 2004 cited in RES, 2006 p.11)
Knowledge Intensive Activity

Reflecting the sectoral growth and stock of employment, the North East exhibits poor employment performance in knowledge intensive activities. Based upon calculations of the proportion of graduates employed within specific sectors\(^{25}\), in 2001 only 12% of regional employment was classified as being high-knowledge intensive, compared to 30% in the UK (FRESA, 2002). More recent calculations suggest that, in 2005, this level had risen to 25% of regional employment (8.4% below the national average), driven by episodes of upskilling within a few large sectors such as health, insurance and pensions, etc. Withstanding these improvements, the largest proportion of regional employment continues to occupy the least knowledge intensive category, with some 38.8% (‘v’ national average 32.0%) of employment in sectors categorised as the lowest levels of knowledge intensity (K4) (Skills North East, 2005).

The North East continues to perform poorly in relation to national levels of R&D expenditure. Most recent evidence suggests that the gap between the North East and national rates are increasing, with a decline from 1.1% to 0.9% of GVA compared to a rise to just over 2% of GVA nationally. In other words, the North East’s expenditure on R&D is half the national average and the lowest of all English regions (State of the Region, 2006). A key point of distinction for the North East’s R&D base is the almost complete absence of government R&D outside of the university sector, meaning the region performs poorly in both business and public sector R&D expenditures. In the absence of government R&D, the North East relies upon Higher Education related activities and funding. According to the State of the Region (2006), despite the proportion of R&D spend provided by business declining from 1998 (0.7% to 0.4% of GVA), this has only been partially offset through higher education institutions.

RDA Policy Interventions: The Regional Economic Strategies

From the 1970’s to the late 1990’s the promotion of inward investment ran as a ‘continuous thread’ within the North East’s economic development policies. In the face of high levels of unemployment coupled with a lack of viable short-term alternatives to provide employment\(^{26}\), inward investment served as a key driver of job creation and sustained the region’s relatively strong manufacturing performance during the 1980’s and early 1990’s (Hudson 2000).

In the late 1990s the North East’s reliance upon inward investment promotion began to change in the face of altered external economic conditions and the increasingly volatile nature of inward investment patterns. Withstanding the steady stream of rationalisation and plant closures in the stock of inward investors during the 1990s, a crisis occurred during 1998 with a swathe of large-scale plant closures

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\(^{25}\) The model of knowledge intensity was developed by the Local Futures Group and categorises knowledge intensity of employment within sectors as K1= sectors with over 40% graduates; K2 sectors with 25% to 40% graduates; K3 = sectors with 15% to 25% graduates; K4= sectors with under 15% graduates (see Skills North East, 2005).

\(^{26}\) For example, during the 1980s and 1990s policies to encourage SME’s in the North have had at best limited success, with the regional economy recording both the lowest rates of new firm formation and lowest net firm growth rate of all UK regions between 1980 and 1990.
across a range of sectors, including the region’s emergent high-technology semiconductor industry. These events compounded a longer term critique of the inward investment model, which questioned the scale and nature of contributions made to the region’s employment and skills base, supplier networks and R&D infrastructure.

At the same time, central government began to shift the focus of regional policy more towards indigenous development through the promotion of R&D and the development of new financial instruments (Regional Policy Commission 1996). This shift in policy focus was primarily delivered through the newly established Regional Development Agency – One NorthEast.

One NorthEast was established under the Regional Development Agencies Act in 1998 and represents one of nine regional agencies in England tasked with the five statutory objectives: economic development and regeneration; business efficiency, investment and competitiveness; employment; skills; sustainable development. A key role for each regional development agency is the generation of a Regional Economic Strategy (hereafter RES), to be reviewed every three years. The RES informs the spending priorities for One NorthEast. To date, One NorthEast has produced three strategies: Unlocking our Potential (1999), Realising our Potential (2002), Leading the Way (2006). By looking across the successive strategies and interventions it is possible to identify iterations and emerging themes.

**Unlocking our Potential: North East Regional Economic Strategy 1999**

The first RES, Unlocking our Potential, played an important role in setting and legitimising a new regional agenda for the North East. Within the then new and evolving regional institutional structure of economic development, the RES was particularly important in helping to define and connect actions across regional and sub-regional agencies. Limited evidence of any form of economic step-change exists, although this can be partially explained by the then limited spending power of the RDA (1% of Regional GDP) and its ties to legacy programmes (SQW, 2002). Unlocking our Potential identified six themes of intervention:

- **Theme 1: Creating wealth by building a diversified, knowledge-driven economy:**

  First, and central to the business theme, was an attempt to strengthen the region’s role and position in industries and activities that compete upon knowledge intensity rather than a low cost base.

  Second, the strategy targeted a business-led growth model to be developed around Business Clusters and Centres of Excellence.

  Potential clusters were identified through a series of external consultancy reports, leading to a long list of 11 potential clusters in 1999, which was subsequently altered to 14 clusters in 2002 (Strategy for Success, 2002). The targeted clusters included: Base Chemicals; Pharmaceutical and speciality chemicals; Food and Drink; Bioscience; Tourism; Automotive; Clothing and Textiles; Defence and Precision Engineering; Digital; Electronics; Environmental Industries; Nanotechnology; Offshore; Creative Industries.

  Alongside and related to the cluster programme was the development of Centres of Excellence, research-led institutions to support the research, science and industry
base. During the life-span of the RES, varying levels of progress was made in establishing centres of excellence in Life Sciences; Digital; Nanotechnology; Process Industries; Renewable Energy. In particular, the emerging role of the ‘knowledge-driven’ economy theme was boosted through the establishment of a Science and Industry Council, funded through a variety of sources, to provide leadership and strategic direction to the role of science and technology within the North East’s development.

- **Theme 2: Establishing a new entrepreneurial culture**

  Reflecting the altered terrain of institutional support for entrepreneurialism and SME’s, both nationally and regionally, the RES proposed a series of long-term objectives. These included simplifying business support, improving access to finance, producing 200 high growth companies by 2010, and supporting networking activities.

- **Theme 3: Building an adaptable and highly skilled workforce**

  Tackling the North East’s position as a ‘low-skill equilibrium’ region formed a key objective within the RES. The strategy aimed to coordinate the strategic development of a skills agenda through the ‘North East Skills Strategy and Action Plan’ and focused upon raising aspirations; improving skills and training infrastructure; workforce development; tackling exclusion; and providing improved labour market intelligence.

- **Theme 4: Recognising our universities and colleges at the heart of the region’s economy**

  Linked to the RES’ objective of developing ‘knowledge-based’ competitiveness for the region, key priorities included developing the HEI the base; improving knowledge/technological transfers; and raising levels of graduate retention. Specific actions ranged from the development of a Higher Education Innovation Fund to support research in specific areas (e.g. clusters) to the prototyping of a research-driven centre of excellence model (e.g. life sciences).

- **Theme 5: Meeting 21st century transport, communication and property needs**

  An ambitious strategy was developed to promote the North East’s inter-regional and international telecommunication and transport systems. In terms of property development, One NorthEast planned to continue the region’s tradition of public-sector led site development across a range of industry and service based projects.

- **Theme 6: Accelerating the renaissance of the North East**

  To connect and support its competitive objectives, the RES prioritised the economic and social development of its urban and rural communities. To be delivered through sub-regional partnerships, the strategy connected with a range of actions including the market towns initiative, large-scale urban flagship projects and regeneration of coalfield communities.
Realising our Potential: North East Regional Economic Strategy 2002

The second RES, Realising our Potential, served as an update and further iteration of the themes and objectives of Unlocking our Potential (1999). While the 2002 themes were more clearly focused, they remained consistent with the earlier strategy. By looking across the two strategies and independent evaluations (SQW 2002; Frontline 2005), several dimensions are worth highlighting.

In a slight shift away from the primacy of ‘knowledge-led’ growth in the earlier RES, Realising our Potential prioritised raising levels of productivity across all business sectors and activities. However innovation and science-based growth remained central to the strategy. The Strategy for Success programme was responsible for four strategic drivers of innovation-led growth: Regional Science and Industry Council; Centres for Excellence (see Box 1); a new commercialisation initiative (NorthSTAR) and the cluster development programme. The cluster programme remained in progress, with even the most advanced cluster projects still in ‘under development’ status.

More generic objectives within business development included: utilisation of ICT infrastructures; refined business support; business networks and productivity alliances (e.g. NEPA) and the creation of new investment funds for businesses. Furthermore, revisiting elements of former economic development models, improving the region’s offer and institutional support to FDI was identified as key driver of growth.

In terms of skills and labour market performance, the updated strategy provided a more holistic, balanced and strategic approach to achieve a ‘healthy labour market supported by a skilled workforce’. Building upon the objectives in the previous RES, and linked to central government requirements, the region developed a more formalised organisational structure for labour market coordination: the Framework for Regional Employment and Skills Action (FRESA). The FRESA provided a joined-up approach for stakeholders operating on both the demand and supply side of the labour market. One NorthEast was responsible for developing and aligning appropriate structures through which the FRESA for the North East could develop and be consistent with the Regional Economic Strategy.

Specific priorities for action in terms of skills categories within the region were:

- Accelerating demand for higher-level skills: In an attempt to break out of the low skill equilibrium
- Creating a step-change in the content, delivery, support and performance of young people at Key Stage 3 (11-14 year olds) and beyond
- Targeting improvements in the delivery of basic skills of the current workforce
- Develop an effective system for the gathering of skills intelligence within the region
- Establishment of an effective governance system for the co-ordination and alignment of activity

The role of culture provided a distinctive dimension to the 2002 RES (Frontline 2005). The strategy identified the role of culture in attracting skilled and creative workers to the region and creative industries gained greater prominence within the
RES, including connectivity to the cluster and the centres of excellence programme. Whilst the region developed a Cultural Strategy for the North East of England 2001-2010, the dynamism and prioritisation attached to the 'cultural theme' also reflected the activities surrounding the Newcastle-Gateshead bid for the European Capital 2008.

Finally, an economic and social inclusion agenda was clearly articulated within an 'all embracing approach to economic renewal'. In particular, the social inclusion agenda provided a clearer focus to the renaissance of rural and urban communities theme developed in the original RES and fed into an attempt to secure inclusive long-term outcomes. The RES highlighted the ongoing work of community regeneration initiatives which draw down national and international funds to deliver locally based economic and social projects and advocated a rationalisation of sub-regional governance in delivering local programmes. In addition to the importance attached to enhancing the cultural and environmental assets of urban and rural communities, the RES emphasised the need to strengthen the important role of the 'third sector' through funding and exchange of best practice.

**Leading the Way: North East Regional Economic Strategy 2006**

In 2006 One NorthEast produced ‘Leading the Way’, a revised version of the regional economic strategy. In contrast to the 2002 'update' the new draft RES provides more substantive changes in strategy and emphasis.

The 2006 RES provides a clearly focused, albeit ambitious, strategy based around a drive to reduce the productivity gap between the North East and the UK by 10% before 2016. The 10% reduction will still leave the regional level of GVA per capita at only 90% of the national level but will nevertheless require a step change in both workforce productivity and participation.

Points of departure within the ‘Leading the Way’ report include:

- Greater emphasis on economic development
- Spatial focus: strengths; weaknesses and opportunities
- Recognition of the role of city-regions within the development of the broader region
- Sector based approach (rather than clusters)
- More people-focused approach: economic participation; aspirations; need to retain high-skilled workers.
- Economic inclusion developed as a new theme
- Priority given to the need for strong regional collective leadership and effective governance systems:
  - Sectors and organisations working collaboratively to challenge and champion the region
  - The prioritisation of, and responsibility for, achieving economic development within the operations of regional and sub-regional programmes
  - People living and working in the region must become increasingly aspirational and outward looking (domestically and internationally)
Leading the Way refocuses the thematic content of previous RES’ and focuses upon three overarching areas for action: Business; People and Place.

- **Business theme**
  - **Enterprise:** strategies to encourage and promote ‘additional’ start-ups are prioritised to address the low business stock of the region, especially in terms of young people, women and deprived communities. Public support for encouraging start-ups remains in development but will seek only to address areas of real demand or market failure.
  - **Business Solutions:**
    - *Information and guidance brokerage:* increased reliance on marketed services and reduction in inefficient direct public-sector support
    - *Segmented Business Support:* high-quality, high-volume product supported by more targeted and specialised services for specific client groups
    - *Specialist Sector Based Support:* One NorthEast sector teams to support strategic sectors in the North East. Sector based approach replaces the former cluster model which had no ‘clear rationale’ (RES, 2006 p.56). Sector based reviews, together with collaborative work with sector organisations, will lead to public-private sector agreements on the provision and direction of support.
    - *ICT Utilisation:* to build upon the strong ICT infrastructure within the region by better integrating ICT within business operations and products.
    - *Continuum of Finance:* to ensure no gaps in funding opportunities, especially for small micro-financing activities and opportunities in social enterprise, creatives etc.
    - *Exports and Trade:* To identify and support trade and export linkages with new and emerging markets, especially within under performing export sectors.
    - *Inward Investment and Embeddedness:* Continue existing FDI strategies to shift towards more knowledge intensive projects
  - **Preparing for Structural Change:** Research-led approach to growth through innovation and creativity
    - *Three Pillars of Industrial Opportunity:* A shift towards specialisation within science and technology based sector, concentrating on: Energy and Environment; Healthcare and Health Sciences; Process Industries. The three pillars reflect “high value and growing sectors, within which the North East has a particularly strong chance of achieving world leading competitive advantage” (RES 2006, p.69). Underlying the three pillars are generic support infrastructures of emerging technologies; digital technology and media, and design. Figure 5 highlights the proposed operation of the strategy.
- **Design Capacity:** A variety of activities, working with national bodies, to improve the design capacity of the North East. A Design Steering Group and a new physical Design Centre North will help develop design capabilities for both manufacturing and services.

- **Newcastle Science City:** Multi-sector initiative to provide step change in the commercialisation of scientific and technological research. The project aims to become one of the “top ten places worldwide to do science based business” (RES 2006, p.80). Targets for development include: ageing and health; energy and environment; molecular engineering and stem cells and regenerative medicine. The project has acquired a large scale ‘flagship’ city centre site.

**Figure 5: Leading the Way’s Three Pillar Approach to Structural Change**

*Activities within the three pillars*

- Bringing together a Leadership Council for each of the three pillars (these already exist in some instances) to steer their development.
- Building close relationships between businesses and universities within and outside the region, particularly with the Northern Way’s N6 group of research intensive universities.
- Attracting funding for industrially relevant translational research, and ensuring wide dissemination of industrially relevant research results.
- Building business and research networks and facilitating collaboration.
- Targeting inward investment to fill supply chain gaps and attract talent; and embedding new companies through integration with the research base and wider industry.
- Accessing NStar funding and building Venture Capital networks to improve access to finance, and utilising DTI funding to assist in efforts to grow the target industries (links with Access to Finance section in Section C2 above).
- Influencing and accessing the EU Framework Programmes to ensure that the region is fully integrated into advanced Europe wide R&D.
- Utilising existing techniques to identify future market developments, and enhancing our capacity to respond to them. We will research and harness international best practice.

Source: One NorthEast, RES, 2006 p. 70
Two key challenges are identified within the labour market theme of the RES: up-skilling the labour force and tackling economic inactivity.

- **Skills:** Following the North East’s pioneering role within the Adult Skills Pilot programme, the region’s successor framework – Regional Skills Partnership – became one of the first to be ratified within England. The RSP, led strategically by One NorthEast, aims to align budgets around the strategic delivery of programmes and projects. The RSP priority areas over the next three years are: developing Management and Leadership skills and capability; increasing the proportion of the workforce qualified to Level 3; building upon the commitment to supporting the achievement of skills for life and Level 2 qualifications; and supporting individuals not currently participating in the labour market to access learning and sustainable employment.

In addition to the RSP objectives, the RES articulates a longer term vision for skills development:

- **Higher Level and Sector Specific Skills to Meet Business Needs:** Building upon recent strategies to strengthen intermediate level skills, the longer term RES perspective shifts attention to higher level skills. In particular, the focus concentrates on higher level skills which are aligned to the needs of business, strategic sectors and are both vocational and transferable. More focused ‘pathways’ for skill progression - for employers and individuals - are advocated to provide increased value added.

- **Raising the aspirations and attainment of young people:** Action to be taken to reduce the number of young people leaving full-time education with no or low qualifications, hindering progression into further education or employment. Key areas of action include programmes to improve the communication and awareness between young people, training and businesses.

- **Economic Inclusion: Improving Access to Employment and Inclusion in Deprived Communities:** The RES proposes a radical new regional approach to improving access to employment through active labour market policies appropriate to the region.

- **Place Theme:**

The RES develops a series of spatial objectives, based around the rationale of the growth potential of the two city-regions: Tyne and Wear and Tees Valley. Within each city region, portfolios of large scale urban infrastructures projects are identified as key drivers. The city-region perspective is complemented by an enhanced Market Towns Programme to promote rural development. By promoting and better communicating a more coherent public sector vision the RES aims to encourage growth in private sector infrastructural investment.

- **Strategic Transformational Regeneration**

This priority aims to develop the capacity for strategic transformational regeneration programmes within the city regions and rural market towns,
securing public and private investment in order to significantly enhance North East England’s quality of place ‘offer’ to skilled workers, entrepreneurs and visitors.

- **Business Accommodation**

  A strategic vision for commercial property provision to be largely private sector led, with assistance provided by the public sector in site reclamation and only in areas of demonstrable market failure. It is vital that the implementation of the Regional Spatial Strategy ensures commercial property and employment land is provided to meet the needs of business and is focused around the city regions, with some sites outside these areas meeting the needs of niche specialisms. In particular, the strategy seeks to overcome market failure, including strategies which encourage taking jobs and development to areas of surplus labour.

- **Transport and ICT Connectivity**

  Improving connectivity within the region will enable labour market accessibility, joining up areas of opportunity with areas of deprivation. It will also improve businesses’ access to markets and enhance communication channels. Transport strengths around the rail, port and airport infrastructure are prioritised for inter-regional and international communications. However, the RES also stresses the need to improve transports communications within the region itself.

- **Promoting, Enhancing and Protecting our Natural, Heritage and Cultural Assets**

  This priority aims to provide high quality natural, heritage and cultural environments that have the capacity to retain, attract and develop skilled workers, entrepreneurs, graduates and visitors. Core to this priority is the objective of developing and projecting the image of North East England both within the region, and to those outside. A large scale regional image campaign ‘Passionate People, Passionate Places’, reflects the inclusion of *image* as a new RES priority area. Culture, image and the role of natural assets in generating economic competitiveness are clear agendas which seek to reverse the adverse external perception traditionally held of the North East. Place-based traits such as tolerance, diversity and equality are offered as key targets for the North East to achieve and portray.
References/Sources of Information


Adams, J (2005a) A Full Employment Region. IPPR


