Session 2006/2007 **Third Report**

COMMITTEE ON THE PREPARATION FOR GOVERNMENT

Third Report on the Economic Challenges Facing Northern Ireland

TOGETHER WITH THE MINUTES OF PROCEEDINGS, OFFICIAL REPORT AND PAPERS RELATING TO THE WORK OF THE SUB-GROUP ON THE ECONOMIC CHALLENGES FACING NORTHERN IRELAND

Ordered by the Committee on the Preparation for Government *to be printed 15 November 2006*

£25.50

Committee on the Preparation for Government

Under the terms of the Northern Ireland Act 2006 the Secretary of State for Northern Ireland, the Rt Hon Peter Hain MP, directed on 26 May 2006 that a Committee should be established on the necessary business relating to the preparation for Government. On 12 June 2006, the Secretary of State directed that the deputy presiding officers, Mr Jim Wells and Mr Francie Molloy, should chair the Committee.

Membership

The Committee has 14 members with a quorum of seven. The membership of the Committee since its establishment on 26 May 2006 is as follows:

Mark Durkan MP
Dr Sean Farren
David Ford
Michelle Gildernew MP
Danny Kennedy
Naomi Long
Dr William McCrea MP
Dr Alasdair McDonnell MP
Alan McFarland
Martin McGuinness MP
*David McNarry
Maurice Morrow
Conor Murphy MP
Ian Paisley Jnr

* Mr McNarry replaced Mr Michael McGimpsey on 10 July 2006.

At its meeting on 12 June 2006, the Committee agreed that deputies could attend if members of the Committee were unable to do so.

Introduction

1. The Committee on the Preparation for Government met on 46 occasions between 5 June and 15 November 2006. At the first meeting on 5 June, the Committee considered the direction from the Secretary of State dated 26 May 2006 and the term 'consensus' in the direction relating to decisions of the Committee. A discussion followed and it was agreed that the Committee would regard consensus as 'general all party agreement'. (A copy of the relevant directions issued by the Secretary of State is attached.)

2. At the first three Committee meetings, the members debated the arrangements for chairing the Committee but were unable to reach consensus on what these should be. The Secretary of State was advised on 7 June that the Committee was unable to select a Chair. On 12 June, the Secretary of State directed that the deputy presiding officers, Mr Jim Wells and Mr Francie Molloy, should chair the Committee.

Referral by the Secretary of State

3. At the meeting on 12 June, the Committee noted that, on 26 May, under the provisions of section 1(1) of the Northern Ireland Act 2006, the Secretary of State had referred the following matter to it –

   'To scope the work which, in the view of the parties, needs to be done in preparation for Government.'

4. During June, each of the parties made a detailed presentation on the issues that it considered needed to be scoped in preparation for government. These began with the presentations from the Alliance Party and the DUP on 20 June. The presentation from Sinn Fein took place on 21 and 22 June and was followed by the presentation from the SDLP on 26 June. The presentations concluded with the UUPAG on 28 June. The minutes of proceedings and minutes of evidence relating to these discussions can be found on www.niassembly.gov.uk/theassembly.

Working Group on the Economy

5. At its meeting on 20 June, the Committee considered a letter from the Speaker enclosing correspondence she had received from the Secretary of State about the establishment of a working group on the economy. The Committee noted that, on 16 May, the Assembly had resolved –

   'That a Working Group should be established to consider the economic challenges facing Northern Ireland and to make recommendations to a restored Executive.'

6. The Committee, however, was not able to reach consensus on the establishment of a working group.

7. On 3 July, the Secretary of State wrote to the Speaker on a number of issues, including the establishment of a working group on economic challenges. The Secretary of State noted that the parties had different views on the best way to give effect to the agreement in the Assembly on setting up the working group. He advised, that given the aim of such discussion was to make preparation for the work of a restored Executive, he was

referring the matter of discussion of economic issues to the Committee on the Preparation for Government under section 1(1) of the 2006 Act and directing them, under paragraph 4(1) of Schedule 1 to that Act, to set up a sub-group and report back to the Assembly in September.

8. This was followed, on 11 July, by a further direction from the Secretary of State to the Committee directing the establishment of three sub-groups, including a sub-group on the economic challenges facing Northern Ireland. On 17 July, the Committee agreed the terms of reference for this sub-group, which then began its work on 20 July 2006.

Report on the Economic Challenges facing Northern Ireland

9. The sub-group submitted its first report on the Economic Challenges facing Northern Ireland to the Committee on 25 August. On 4 September, the Committee agreed that the report should be printed as the first report of the Committee on the Preparation for Government.

Debate in plenary

10. The report was debated in the Assembly on 11 and 12 September and the following motion was carried –

'That the Assembly approves the first report from the Committee on the Preparation for Government on the economic challenges facing Northern Ireland; agrees that it should be submitted to the Secretary of State for Northern Ireland and calls on the Secretary of State to take action to implement the recommendations in the Report.'

New terms of reference

11. At its meeting on 4 September the Committee also agreed: -

(a) new terms of reference for the sub-group as follows –

- To consider the results of the ERINI research and the commissioned DETI study into the fiscal options to prepare a costed case for consideration by a restored Executive and the Treasury;
- To consider and report on measures required to develop an integrated skills and education strategy capable of meeting the current and future needs of the economy and based on best practice elsewhere; and
- To undertake father work on how an economic package/peace dividend could contribute to economic regeneration.

and

(b) that the sub-group should submit an interim report to the Committee by 4 October 2006 on its work relating to an economic package/peace dividend and should report on the rest of its work by 23 October 2006.

Second Report on the Economic Challenges Facing Northern Ireland

12. The sub-group submitted its second report on 4 October 2006. The Committee considered this at its meeting on 6 October and agreed the contents of the report.

13. At this meeting, the Committee expressed concern that the sub-group could not fulfil, in their entirety, the terms of reference agreed on the 4 September because of the refusal of the Secretary of State to provide the necessary information. This followed notification from the Secretary of State, on 18 September that he could not accept the recommendation in the first report that the Department of Enterprise, Trade and Investment (DETI) should "commission an independent study into the relative economic benefits and comparative costs of a range of fiscal measures…" as fiscal issues are "excepted matters" and therefore outside the remit of the Committee.

14. The Committee was unable to reach agreement on printing the report.

15. The Committee agreed to extend the deadline for production of a third report from the sub-group to 30 October 2006.

16. On 6 October the Secretary of State directed that the second report of the sub-group should be published.

Further Issues relating to the Sub-Group

17. At its meeting on 23 October the Committee discussed a paper from the Consumer Council setting out its views on proposed water reforms for Northern Ireland. It was agreed that the matter should be referred to the sub-group to arrange an evidence session with the Consumer Council and to report back to the Committee.

18. It was also agreed that, in preparation for the parties meeting with the Chancellor of the Exchequer on 1 November, the sub-group should carry out preparatory work for that meeting and establish as much consensus as possible on the key issues to be raised.

19. At its meeting on 30 October the Committee considered a paper from the sub-group on its preparatory work for the meeting with the Chancellor and on the oral evidence session with the Consumer Council.

20. The Committee agreed a recommendation from the sub-group that, as part of a proposed economic package, the public services funding gap caused by a delay in the water reform legislation and the capital backlog, or at least a significant percentage of it, be paid for by Government as additional funding.

21. The Committee agreed to give the sub-group the authority to commission, if it so wished, an independent study to accurately determine the costs associated with a delay in implementing the water reform legislation.

22. The Committee also agreed to extend the deadline for the sub-group's third report to 13 November.

Third Report on the Economic Challenges Facing Northern Ireland

23. The sub-group submitted its third report on 14 November and the Committee considered this at its meeting on 15 November and agreed the contents of the report.

Contents

Sub-group Terms of Reference and Membership

Terms of Reference

1. To consider the results of the ERINI research and commissioned DETI study into the fiscal options to prepare a costed case for consideration by the Treasury;

2. To consider and report on measures required to develop an integrated skills and education strategy capable of meeting the current and future needs of the economy and based on best practice elsewhere; and

3. Undertake further work on how an economic package/peace dividend could contribute to economic regeneration.

4. To report to the Committee on the Preparation for Government (PfG Committee) by 4 October 2006 on point 3 above and by 23 October 2006 on the other matters above.

NB: The PfG Committee agreed to extend the deadline for the sub-group's 3rd report to 13 November 2006.

Membership

The sub-group has 10 members comprising 2 representatives from the Alliance Party, DUP, SDLP, SF and the UUP. One of the 2 party representatives must be drawn from PfG Committee, but substitutes may attend for either representative. The membership of the sub-group, including substitute members, since its first meeting on 20 July 2006 has been as follows:

Nominated members:

David Ford (Alliance Party)
Sean Neeson (Alliance Party)
Ian Paisley Jnr (DUP)
Peter Weir (DUP)
Dr. Alasdair McDonnell MP (SDLP)
Margaret Ritchie (SDLP)
Michelle Gildernew MP (SF)
Mitchel McLaughlin (SF)
Dr. Esmond Birnie (UUP)
David McNarry (UUP)

Substitute members:

Naomi Long (Alliance Party)
Kieran McCarthy (Alliance Party)
Diane Dodds (DUP)
Edwin Poots (DUP)
Lord Morrow (DUP)
David Simpson MP (DUP)
Nelson McCausland (DUP)
Alex Easton (DUP)
Wilson Clyde (DUP)
Robin Newton (DUP)
George Dawson (DUP)
George Ennis (DUP)
William Hay (DUP)
Mark Robinson (DUP)
Dr. Sean Farren (SDLP)
John Dallat (SDLP)
Fra McCann (SF)
Barry McElduff (SF)
Philip McGuigan (SF)
Kathy Stanton (SF)
Roy Beggs Jnr (UUP)
Leslie Cree (UUP)

Chairpersons

Chairpersons approved by the Secretary of State are listed below. Chairpersons have no voting rights.

- Jim Wells (DUP)
- Francie Molloy (SF)
- Naomi Long (Alliance Party)
- Alban Maginness (SDLP)
- David McClarty (UUP)

Quorum and Voting

The quorum set by PfG Committee is 5, (excluding the Chairperson) with the proviso that a representative from each of the five parties must be present.

Voting is by simple majority and each party has one vote.

NB: PfG Committee agreed a proposal by the sub-group to change the quorum requirement at its meeting on 18 September 2006. The quorum had previously been set by PfG Committee at 7, excluding the Chairperson.

Executive Summary

This third report to the Committee on the Preparation for Government (PfG Committee) completes the work of the economic sub-group against its terms of reference. The sub-group had agreed to further examine the issues of skills training, particularly in the context of developing a focus on Science and Technology as drivers of a sustainable economic recovery. However the necessity of preparing a detailed submission for the meeting with the Chancellor, Gordon Brown became an over-riding priority. The sub-group has sought a formal meeting with the Minister, Maria Eagle MP, to hear the Government's response to the recommendations in all 3 reports. It is hoped that this can be arranged promptly after PfG Committee publishes the report.

The report completes the sub-group's consideration of fiscal and education and skills matters and contains recommendations drawn from oral and written evidence submitted by a range of key witnesses. The report also includes a research study on corporation tax commissioned by the Industrial Task Force from the Economic Research Institute of Northern Ireland (ERINI). This study provides the foundation for a costed and robust case to HM Treasury supporting a reduction in corporation tax as an essential part of the proposed economic package. The parties represented on the sub-group have reached consensus on the need to have a competitive rate of corporation tax with the possibility of other equivalent fiscal incentives. The sub-group notes that the ERINI study contains invaluable information in support of the recommendations made in its first and second reports.

The sub-group took oral evidence from the Consumer Council for Northern Ireland on the impact of water reform proposals on business costs. The sub-group was persuaded by the evidence to make a number of recommendations to PfG Committee including a recommendation that the water reform legislation be deferred and dealt with as an NI Assembly matter and that the costs of such deferment should form part of an economic package. The Department for Regional Development submitted a subsequent written response to the Consumer Council evidence and this is included in the report appendices.

A late submission from the Federation of Small Businesses (FSB) is included in the report. The sub-group recognises that small businesses form the bedrock of the NI economy and agrees that it would be appropriate to ensure that the views of FSB on the economic package should be brought to the attention of PfG Committee. The sub-group recognises that there are a range of potential fiscal and financial incentives that need to be evaluated and that the FSB proposal merits consideration in future discussions with HM Treasury.

As previously noted the sub-group provided active support to the political parties in preparation for discussions with the Chancellor of the Exchequer on 1 November 2006. The sub-group stands ready to provide further support and briefing material if required.

The sub-group recognises that the challenges facing the NI economy are complex and that there is no "silver bullet" solution. The sub-group agrees however, that a radical approach is required to rebalance the economy and to attract high value-added, export orientated companies. In its reports the sub-group has called for an integrated approach by ensuring that its recommendations in support of reduced business taxes and costs are presented together with the need to invest in education and skills provision, research and development and on infrastructure. The sub-group expressed its earnest concern about the need for clarity over the future of education in NI. The sub-group agreed that account should be taken of any strategic financial/policy implications which may arise out of the Bain Report. The sub-group also agreed that special attention should be given to science, technology and engineering. The evidence submitted to the sub-group consistently supports these themes and the sub-group does not believe that a single-issue approach will transform economic prospects in the longer term.

Recommendations

The sub-group agreed a range of recommendations as part of this third report to the PfG Committee. These are detailed below.

1. The sub-group recommends that PfG Committee should press the Secretary of State to make the Minister, Maria Eagle MP available at the earliest opportunity to meet with the sub-group to provide a comprehensive response to its three reports. The sub-group believes that this is essential to provide an opportunity to question the Minister on the Secretary of State's response to its first report in his letter of 31 October 2006. (Paragraph 7)

Fiscal and Financial Incentives

2. The sub-group recommends that the political parties consider the merits of the proposal from the Federation of Small Businesses for a 'Rates Reinvestment Fund' as part of the ongoing discussions with Treasury on an economic package. (Paragraph 25)

ERINI Research on Corporation Tax

3. The sub-group recommends that PfG Committee and the Secretary of State take note of the ERINI research conclusions, which underscore the case for NI having a competitive rate of corporation tax, and that this key research should be used to inform discussions on the economic package. (Paragraph 30)

Education and Skills

4. The sub-group recommends that there is a need for clarity over the future of education in NI. It further recommends that account should be taken of any strategic financial/policy implication which may arise out of the Bain Report. (Paragraph 31)

5. The sub-group recommends that special attention should be given to science, technology and engineering as part of an integrated education and skills strategy. (Paragraph 32)

6. The sub-group calls for greater urgency, recognition and action in NI to avoid a potential shortfall in the skills base needed to support a knowledge-based economy. (Paragraph 35)

7. The sub-group concludes that key lessons can be learnt from the RoI approach to education and skills development focussed on the needs of the economy, and recommends that government departments and a restored Executive should seek to apply these lessons as appropriate to circumstances in NI. (Paragraph 44)

8. The sub-group recognised the important contribution of Sector Skills Agreements to identifying skills requirements and improving the delivery of training and education through a partnership approach and collaborative action between employers and education/skills providers. The sub-group acknowledges and recommends the need to develop and adequately

fund this approach as part of a flexible strategy linking the supply of skilled labour to the needs of business and economic growth. (Paragraph 49)

9. The sub-group supports the proposals in the Association of Northern Ireland Colleges (ANIC) paper and recommends that the Department of Education (DE) urgently addresses poor literacy and numeracy skills among school leavers, and that Department of Employment and Learning (DEL) should develop creative approaches to life-long learning opportunities that allow less able school achievers to reach their full potential in skills attainment to find employment. (Paragraph 53)

10. The sub-group recommends that, in the context of developing an integrated skills and education strategy to support economic development, the Government should give careful consideration to the proposals from the two universities for additional investments and related actions to maximise their potential contribution to the development of a sustainable knowledge-based economy in NI. (Paragraph 65)

11. The sub-group concurs with much of the evidence from UUTech Ltd and recommends that Government and a restored Executive should carefully study the measures proposed by UUTech Ltd in its submission with a view to developing strategies to identify, resource and market university and FE college links to business both in NI and internationally. (Paragraph 71)

Water Reform

12. The sub-group recommends that, as part of an economic package:

(a) The water reform legislation is deferred and dealt with as an NI Assembly matter.

(b) The public services funding gap caused by this deferment and the capital backlog, or at least a significant percentage of it, be paid for by Government as additional funding.

The sub-group further recommends that the Secretary of State commission an independent study to accurately review all aspects of the water reform proposals during the deferment period. (Paragraph 80)

Introduction

Background to the Report

1. In the Economic sub-group's first two reports to the PfG Committee the sub-group took evidence on the impediments to economic growth, the content of a potential economic package, fiscal issues and the need for a flexible education and skills strategy linked to the needs of the economy. The sub-group's second report was prepared to assist the political parties in discussions with the Treasury on the potential contents of an economic package and included an analysis of a range of fiscal options.

2. This third report concludes the sub-group's consideration of fiscal options and presents an analysis of the Economic Research Institute of Northern Ireland (ERINI) research into the economic gain to Northern Ireland from the introduction of the same corporation tax arrangements as in the Republic of Ireland (RoI) and, in particular, to assess the extent to which this would enable Gross Value Added per head (GVA) in NI to converge with the UK average. This key research was heralded at the recent 11th NI Economic Conference as a definitive work that could provide the necessary evidence to underpin the case for a more competitive rate of corporation tax to HM Treasury. The sub-group would like to record its gratitude to Sir George Quigley and the Industrial Task Force for making the study available before its formal publication, and to Victor Hewitt, Director of ERINI for his regular briefing updates on the study and expert assistance in fiscal and public expenditure affairs. The full study report is included at Appendix 4.

3. This third report also provides more evidence from key stakeholders on fiscal issues and on the need for an appropriately resourced and effectively implemented education and skills strategy (Appendices 3 and 4). The sub-group has recognised that fiscal competitiveness alone will not be sufficient to move the economy onto a new growth trajectory, but that a supportive base of an appropriately skilled and educated workforce is equally important in promoting and sustaining economic growth, innovation and a culture of entrepreneurship in NI.

4. The sub-group welcomed the positive impact made by its second report on the political negotiations in Scotland and notes that this report and representatives from the sub-group are to be included in planned discussions with HM Treasury on the Comprehensive Spending Review. The sub-group recognised the contribution made by its economic advisers to its second report and arrangements were made to include advice from the advisers during the discussions with the Chancellor of the Exchequer, Rt Hon Gordon Brown MP, at a meeting on 1 November 2006 in 11 Downing Street.

Scope and Constraints

5. The current political negotiations limited the opportunity for the sub-group to take further oral evidence. The sub-group however agreed to take written evidence from 12 organisations and individuals. These detailed submissions are included in the report appendices.

6. The report includes a summary of the written evidence and an analysis of the ERINI research. The report's recommendations reflect the evidence presented and support the conclusions in the previous reports. The decision by PfG Committee at its meeting on 30 October 2006 to extend the deadline for the report to 13 November allowed the time required for ERINI to complete the corporation tax study and for the sub-group to hear a presentation on the study at its meeting on 9 November 2006.

7. The sub-group received a response from the Secretary of State to its first report on 8 November 2006. The sub-group had invited the Minister, Maria Eagle MP, to attend the sub-group's meetings on 5 or 26 October 2006. The sub-group had noted the Minister's response in a letter of 3 October 2006 (Appendix 1) that she was not yet in a position to respond and would wish to consider all 3 reports before providing a comprehensive response. The sub-group would wish to meet again to take evidence from the Minister and to hear the Government's response to its reports in person. A letter has been issued to the Secretary of State requesting the Minister's attendance as soon as possible after this report is published by PfG Committee (Appendix 1). **The sub-group recommends that PfG Committee should press the Secretary of State to make the Minister, Maria Eagle MP available at the earliest opportunity to meet with the sub-group to provide a comprehensive response to its three reports**. **The sub-group believes that this is essential to provide an opportunity to question the Minister on the Secretary of State's response to its first report in his letter of 31 October 2006.**

The Sub-Group's Approach

8. Whilst the sub-group had little opportunity to take further oral evidence for this report it had in any event already held 26 evidence sessions for its previous reports and had become well acquainted with the key issues. In addition to receiving 12 written submissions, the sub-group commissioned an analysis of the ERINI research from its economic advisers.

9. The sub-group deliberated on the evidence submitted at its meetings on 26 October, 9 and 13 November 2006 and agreed its third report. Under the section 'Review of the Evidence Presented to the sub-group', the written evidence is summarised and the key points highlighted. The sub-group reviewed the analysis of the ERINI research commissioned from the economic advisers and include this in the report. Advice from its economic advisers has informed the sub-group's conclusions and recommendations in the report.

10. The Secretary of State's decision not to provide any views or opinions on fiscal matters or to commission the independent research recommended in the first report was criticised by PfG Committee. The Secretary of State's decision effectively prevented the sub-group from fully meeting its terms of reference for the third report. The sub-group however notes that its recommendation on corporation tax in the second report is reinforced by the independent research provided by ERINI.

11. The report and associated papers are set out in a single volume. The appendices include: minutes of proceedings relating to the report and correspondence on procedural and other matters including correspondence with the Secretary of State at Appendix 1; official report

of proceedings relating to the report at Appendix 2; written evidence submitted to the sub-group at Appendices 3 and 4; and the ERINI research paper at Appendix 4, section 2.

12. This final report completes the work of the sub-group as set out in the original, and subsequently revised, terms of reference from PfG Committee. The sub-group eagerly awaits a response from the Secretary of State and his Ministers to all 3 reports and considers it essential that an opportunity is provided to question the Minister, Maria Eagle MP, and to place on the record the Government's considered response on issues that are fundamental to the future success of the NI economy. The sub-group recognises that a future Executive needs a firm commitment from the Government to secure the change and investment called for unanimously by all the political parties as an essential foundation for the restoration of devolution in NI.

13. The sub-group and its staff have been extensively involved in supporting and providing briefing material for the political parties to prepare for discussions with the Chancellor. This intensive activity stretched over several weeks and was provided at the request of PfG Committee and the parties. The sub-group and its advisers are prepared to provide ongoing support during the forthcoming discussions with HM Treasury on the economic package if this is required.

Review of the evidence presented to the sub-group

Introduction

14. This section summarises and evaluates the written evidence gathered by the sub-group. Part 1 deals with further evidence presented on the case for fiscal and financial incentives. Part 2 includes an analysis of the ERINI research into the potential costs and benefits of a reduction in corporation tax to a rate at least as competitive as applies in the RoI. The ERINI research paper is included at Appendix 4. Part 3 provides a summary of new evidence on the need to adequately resource and deliver an integrated education and skills strategy in support of economic growth. Part 4 concludes the report with a summary of oral and written evidence provided by the General Consumer Council for Northern Ireland on water reform and a written response from the Department for Regional Development.

15. The sub-group made specific recommendations to PfG Committee on foot of the Consumer Council evidence and these are included in the list of recommendations (at page 2). The sub-group had no remit to consider the broader issue of water reform and restricted its deliberations to matters related to the cost to business of water reform and the case for deferring water charges as part of an economic package.

Part 1: - Fiscal and Financial Incentives

Professor John McCanny, Director Institute of Electronics, Communications and Information Technology (ECIT) at Queen's University Belfast (QUB)

(Professor McCanny's submission deals with both fiscal and education/skills issues and is summarised in the respective sections below).

16. The evidence from Professor John McCanny suggested that, although NI is recognised as having expertise in R&D areas of technology relevant to major developments in the electronics and IT sectors, it tends to attract intellectual backroom work rather than major export led development. It was pointed out that important R&D based FDI projects have gone to RoI despite NI having stronger levels of relevant technical expertise. The sub-group noted the conclusion of Professor McCanny that until an equitable fiscal environment is in place, NI is unlikely to fully capitalise on the opportunities that may arise from R&D investment and on the multipliers that could result in terms of major growth in export or tradable goods or services jobs.

Northern Ireland Committee Irish Congress of Trade Unions (NIC ICTU) Submission

17. The key message of the submission from the trade union movement is that the economic package for NI should be about more than just corporate tax concessions. Specifically there

should be a clear commitment to improving the skills of the workforce and to addressing some other key infrastructure needs. The submission also stressed the need to demonstrate that potential fiscal incentives can produce more and higher paid jobs as well as making a contribution towards improving overall skill levels. From a trade union perspective it is argued that economic growth is not an end in itself and 'the test of any fiscal incentive must … be whether it is likely to lead to more and better jobs through economic growth'.

18. The trade union submission expressed doubts about the effectiveness of lower corporation tax as a means of stimulating job creation and refers to concerns about the potential risks of a lower tax regime in the context of resource availability for other programmes of regional funding.

19. In the context of enabling NI to compete on a level playing field with the RoI for FDI flows, the submission argued that it was not lower corporate tax alone that enabled the Republic to attract so much outside investment. It underlined important roles played by other factors such as the availability of a skilled workforce able to meet the needs of a changing business environment, strong support for R&D, sustained investment in public infrastructure and the success of more than 20 years of partnership programmes between trade unions, employers and governments.

20. The submission from NIC ICTU also concluded that a case exists for enhanced tax allowances for R&D and for enhanced training. In terms of the former, NIC ICTU recognises that there is a question of whether even a substantially enhanced rate of tax credit for R&D is likely to make a material difference to the state of the NI economy. The sub-group regards this as a realistic view, and one that aligns with its position on R&D tax credits, as set out its second report to PfG Committee (i.e. that efforts to expand business R&D are important and that, if reduced corporation tax is unavailable, then higher R&D credits should be tried).

21. Having regard to the trade union position, and in particular the job creation test which it applies to fiscal incentives, the sub-group notes the findings from the ERINI research into the projected impact of FDI arising from a reduction in corporation tax in NI to match that in RoI.

Federation of Small Businesses (FSB)

22. In its submission, FSB emphasised the need for an economic package to address the needs of indigenous small business, which currently make up 98% of all businesses in NI. The importance of attracting FDI was also recognised and FSB put forward a proposal for a 'Rates Reinvestment Scheme' which it believes will benefit both indigenous businesses and FDI.

23. FSB points out that despite NI's dependence on small business, it is the only region in the UK that does not have a small business rates relief scheme. It proposes that Treasury set up a 'Rates Reinvestment Fund' of £3bn to cover the costs of 50% rates relief over a ten-year period to qualifying businesses. The relief would be conditional upon the businesses reinvesting the savings for the purpose of expanding or modernising to meet future economic challenges. FSB suggests that this reinvestment could, for example, include employing more staff, improved training programmes, investing in new equipment, upgrading premises, marketing new products, expanding export opportunities, or investing in R&D. FSB also suggests that the financial information gathered on small businesses by the various government collection agencies could form the basis of administering the Rates Reinvestment Fund.

24. The FSB submission also argues for a freeze on the current 25% rates bill for manufacturers during this ten-year period and that Government should establish a full independent review of the Non-Domestic rating system.

25. In considering the FSB submission, the sub-group is unclear both as to how the costs of the proposed fund could be met (e.g. as an addition to any other elements of an economic package or wholly or partly from within existing resources) and as to the practicalities of policing such a scheme. Nonetheless, **the sub-group recommends that the political parties consider the merits of the proposal from the Federation of Small Businesses for a 'Rates Reinvestment Fund' as part of the ongoing discussions with Treasury on an economic package**.

Part 2: - ERINI Research Paper on Corporation Tax

Summary and Assessment of the Draft ERINI Report

26. The sub-group noted that the ERINI study is a comprehensive report and that it is the first systematic attempt to assess the roles of corporate taxation and foreign direct investment (FDI) in economic regeneration. It has been produced in a rigorous fashion. It examines the theoretical connection between corporation tax rates and the location decisions of foreign-owned enterprises. FDI inflows are seen as fundamental to regional industrial regeneration. In terms of the body of knowledge, a survey of the relevant empirical literature uncovers a strong inverse relationship between corporate tax rates and the attraction of FDI. The report also notes that factors other than tax are important in the FDI equation and the existence of a pool of well qualified labour, reasonable infrastructure, business friendly and robust political structures and membership of wider economic unions are also important ingredients. In situations where these locational factors are similar, the existence of a lower rate of corporate tax is a powerful attraction to mobile international capital. The report also attempts to assess the likely impact on industrial regeneration in NI of a significant reduction in the rate of corporation tax. The assumptions used in this modelling exercise are, on the whole, rather conservative. The risks to the central case are mostly on the upside. It is likely therefore to underestimate the longer-term impact on the economy of a lower corporate tax regime.

27. The empirical findings of the report may be summarised as follows:

- Cutting corporation tax by 50% would set in train changes in the economy through new investment and increased activity that would reach the 'break even' point in tax terms in 2013, after incurring an initial cost of £310m in the first year. Beyond 2013 there would be a net gain to both NI and the UK public finances;
- Under this scenario by 2030, 184,000 additional jobs would be generated compared to the base forecasts which assume no change in existing policies, producing an extra £30.1bn of additional GVA by 2030;
- Economic growth (GVA) would average 5% per annum over the forecasts. This represents a doubling of the present growth rate and would significantly reduce the prosperity and productivity gap with the UK.

- The assessment of potential FDI flows is based on recent flows into the RoI. For this potential to be realized will require a complete overhaul of our existing industrial support mechanisms and a dedicated focus on opening NI to the world economy.
- The risk to the UK mainland economy of transfer pricing and movement of production could be important but it is not a condition required for the results of this study.
- The projections assume that NI is able to retain existing support measures for industry. If this is not possible the path to a new higher growth trajectory may be longer than the modelling exercise projects.
- The report has not been concerned with the mechanics of implementing a policy of reducing corporation tax in a specific region of the UK. There are serious difficulties, including the issue of EU State aids in such a policy but other work outside this study suggests that these are not insurmountable.

28. The report shows that a reduced rate of corporation tax could yield real and lasting benefits for the NI economy. These benefits would not flow automatically without the need to address the entire range of existing support mechanisms and institutional infrastructure. A cut in corporation tax should therefore be viewed as a catalyst for refocusing all of the energies of the region on meeting the challenge of engaging through trade and other means with the global economy. Without such an engagement the regional economy will never reach its full potential.

Conclusion

29. The ERINI study is a valuable contribution to the debate. First of all it establishes a strong theoretical and empirical connection within the body of knowledge between the rate of corporation tax and the attraction of FDI. It then examines the experience of the RoI in attracting FDI by means of the low corporation tax and shows that this stimulated favourable policy reform and policy developments that ultimately underpinned the resurgence of the Irish economy. In particular the report traces the positive spillover effects to be derived from large volumes of foreign investment - the positive impacts on skills formation, on vocational education, on local business supply chains, on self-employment and enterprise start-ups. There is an assessment of the relevant downside risks of a move to lower corporation tax rate in NI with the conclusion being that the advantages of such a move outweigh the disadvantages by a large margin. The overall message of the report is that a more favourable corporation tax regime in NI has the potential to transform the industrial structure of the region over a reasonable time period and that there is no other realistic policy option available that could achieve the same outcome. If it is accepted that the impressive economic resurgence of the RoI over the last 15 years has been catalysed by its lower corporation tax regime, then it can be claimed that NI is at a more advanced development stage and would therefore be more amenable to the positive influence of such a lower tax system.

30. **The sub-group recommends that PfG Committee and the Secretary of State take note of the ERINI research conclusions, which underscore the case for NI having a competitive rate of corporation tax, and that this key research should be used to inform discussions on the economic package**.

Part 3: - Education and Skills

31. **Following its meeting on 13 November 2006 the sub-group recommends that there is a need for clarity over the future of education in NI. It further recommends that account should be taken of any strategic financial/policy implications which may arise out of the Bain Report**.

32. **The sub-group also recommends that special attention should be given to science, technology and engineering as part of an integrated education and skills strategy**.

Professor John McCanny, Director Institute of Electronics, Communications and Information Technology (ECIT) at Queen's University Belfast (QUB)

33. In his submission Professor John McCanny, highlighted issues arising from a recent study into the Science and Engineering skills base in the island of Ireland. This study by the Irish Academy of Engineering's 'Knowledge Island 2020' taskforce recommended that, inter alia, the supply of engineers be increased by 7% p.a., that of IT staff by 6% p.a., and the number of PhDs by 13% p.a. year on year. Whilst the Republic has taken initiatives to address the issues raised in the study, Professor McCanny drew attention to a worrying trend in the opposite direction in NI.

34. Here the number of undergraduate applications for subjects such as Electrical and Electronic Engineering and Computer Science has dropped considerably in recent years and this UK trend is attributed to the drop in students studying STEM subjects at A level, notably Physics. Professor McCanny also pointed out that though the overall PhD numbers remain reasonably healthy in NI, this reflects the increasing numbers of overseas students, particularly from SE Asia, including China. Increasingly these overseas students are returning home rather than remaining in NI to contribute to the local economy. Meanwhile the number of applicants from UK domiciled students taking PhDs continues to drop.

35. In describing his concerns, Professor McCanny explained that: 'Important issues are beginning to emerge in terms of the supply chain of advance scientific and engineering skills where urgent action is needed going right back to primary schools. Indeed it may be argued that a much more integrated "end-to-end" strategy linking education at school and university level, through R&D and industry to a wider economic agenda is needed.' In concurring with this view, **the sub-group calls for greater urgency, recognition and action in NI to avoid a potential shortfall in the skills base needed to support a knowledge-based economy**.

Professor Frank Barry, University College Dublin – Third-Level Education, Foreign Direct Investment (FDI) and Economic Boom in Ireland (October 2006)

36. In written evidence to the sub-group Professor Barry presented compelling evidence linking the impact of the RoI education and skills strategy to the development of the economy. Professor Barry's paper identifies a synergy between the RoI industrial strategy, which focussed on attracting FDI, and the "orientation of the third-level education system". The economic boom of the 1990s has seen real income per head increase from 65% of the Western European average to above parity, unemployment has tumbled and numbers in work have increased by over 50%. The sub-group agreed that this level of success offered key lessons for NI on how to approach the link between economic growth and education.

37. The sub-group noted that RoI benefited from a series of planned and fortuitous economic shocks to the economy during the 1980s. These included a planned switch from a high tax regime to a low business tax model made possible by some years of low public expenditure and high personal taxation. The doubling of EU Structural Funds in 1989 facilitated investment in infrastructure projects, commercialisation of the telecommunications system attracted IT service providers and tourism numbers doubled during the decade following airline deregulation in 1986. The net result was that RoI benefited by attracting a disproportionate share of the FDI flows into and within Europe.

38. The sub-group noted Professor Barry's conclusions on the positive impact made by a rapid expansion in educational throughput of suitably skilled people on RoI's ability to attract FDI in certain key high-tech sectors. Successive surveys of foreign-owned firms reveal that the availability of skilled labour was one of the important determinants in their decision to locate in RoI. Major expansions were seen in Office and Data Processing Equipment, Pharmaceuticals and Medical Instruments sectors where employment grew from 10% to 41% between 1975 and 2000. Ireland has also become synonymous during the 1990s as a location for off-shore services in computer software, international financial services and other business process outsourcing activities such as call centres.

39. Professor Barry identifies 5 factors that have contributed to RoI success in attracting FDI:

- EU membership, a Western European seaboard location and an English-speaking environment;
- Low corporation tax;
- The skills and experience of the Industrial Development Agency (IDA);
- The quality of the telecommunications infrastructure; and
- An education system that is tightly integrated with the country's FDI-orientated development strategy.

40. The sub-group noted Professor Barry's reference (page 6 of his paper) to numerous studies that have "verified the importance of the corporation tax regime for FDI inflows". RoI has the lowest rate of corporation tax in the EU15 and also the lowest effective rate. This reinforces the recommendations made by the sub-group in its first 2 reports in favour of a lower and more competitive rate of corporation tax in NI.

41. The sub-group also noted the important role played by the IDA in using its influence to press for continuous improvements in education infrastructure and in promoting alternative models in telecommunications, which allowed RoI to attract a range of new off-shoring IT-enabled service sectors.

42. The sub-group took note of evidence in the paper from surveys of multinational companies indicating that education and skills availability was ranked second in importance after low corporation tax for attracting FDI. RoI was ranked number 2 out of 49 countries in an International Institute for Management Development survey in 2002 in response to the statement "the educational system meets the needs of a competitive economy". RoI has the highest proportion of the population aged 25-34 in the OECD with third-level education

qualifications. Much of the new throughput in tertiary education is concentrated in sciences and scientific degrees are in high demand by foreign-owned companies in RoI.

43. The sub-group agrees with Professor Barry's conclusion that RoI could not have upgraded into or attracted the high-tech sectors had it not been able to provide the skilled workers required by these sectors.

44. **The sub-group concludes that key lessons can be learnt from the RoI approach to education and skills development focussed on the needs of the economy, and recommends that government departments and a restored Executive should seek to apply these lessons as appropriate to circumstances in NI**.

Sector Skills Development Agency

45. The Sector Skills Development Agency submission outlines the role that the organisation plays in the achievement of the Department of Employment and Learning skills strategy for Northern Ireland. It is a fairly new organisation but it is already working closely with existing Northern Ireland Sector Training Councils. At present a number of Sector Skills Agreements are being developed across the public and private sectors to address skills issues relevant to their respective areas of responsibility. It is envisaged that these Sector Skills Agreements will more effectively develop an understanding of current and future skills needs.

46. The sub-group noted that in its submission the Sector Skills Development Agency supported the core argument in Professor Barry's paper on the need to move to a "demand led system of skills provision". The submission emphasised the need to provide adequate resources for the Skills for Business network and that more work was needed to develop more effective links with employers, representative bodies, training providers and government.

47. The submission refers to a report by Professor Ashton, Emeritus Professor of Leicester University, Centre for Labour Studies who had reviewed best practice in a number of countries that had developed sector-based approaches to raising employer demand for skills. No single set of best practices was identified but the report found that a number of key components were required for an effective sector skills approach including:

- Enabling employers to play a key role in identifying skill requirements and designing competencies required;
- Securing employer consent to enable employees to gain recognition for their skills in the wider labour market;
- Using financial incentives to encourage employee skills development e.g. trainees wage subsidies and tax incentives;
- Government funding for Sector Skills Bodies;
- Funnelling some government funds for public training provision through employer-led Sector Skills Councils.

48. The sub-group recognised the key role played by the Skills for Business network in boosting national productivity by identifying skills gaps and shortages on a sectoral basis. The sub-group accepted that an employer-led approach should be encouraged if it leads to improved responsiveness by the education sector to the needs of business, increased opportunities to

develop skills, boosts productivity and promotes the supply of apprenticeships and occupational qualifications and standards.

49. **The sub-group recognised the important contribution of Sector Skills Agreements to identifying skills requirements and improving the delivery of training and education through a partnership approach and collaborative action between employers and education/skills providers. The sub-group acknowledges and recommends the need to develop and adequately fund this approach as part of a flexible strategy linking the supply of skilled labour to the needs of business and economic growth**.

Association of Northern Ireland Colleges (ANIC)

50. The sub-group welcomed this further paper from ANIC. It was noted that colleges were in the middle of a major change programme and that the Department for Employment and Learning (DEL) was merging the current 16 colleges into 6 larger area-based colleges by August 2007. The sub-group also welcomed news that the 6 colleges will have an enhanced economic focus. This drew comparison with the development of Regional Colleges in the RoI, which had such a positive impact on education and skills provision linked to the needs of the economy.

51. The sub-group agrees with ANIC that if the full potential benefits of reorganisation are to be realised, consideration must be given to the level of resources made available. The sub-group has made a number of recommendations on the need to develop an integrated education and skills strategy. The sub-group also agrees with ANIC that the NI economy must develop strengths in value-added, innovation and "the knowledge economy" and drew attention to this in its first report.

52. It was noted that ANIC also suggest that there is inadequate integration and resource allocation across government departments to "unlock the potential of colleges to promote economic development at a regional and local community levels".

53. The sub-group shares ANIC concerns about widespread poor literacy and numeracy levels and the negative impact this has on achieving students' full potential through professional and technical courses in colleges. **The sub-group supports the proposals in the ANIC paper and recommends that the Department of Education urgently addresses poor literacy and numeracy skills among school leavers and that DEL should develop creative approaches to life-long learning opportunities that allow less able school achievers to reach their full potential in skills attainment to find employment**.

54. The sub-group recognises the concern of colleges that a balance is important between social and economic needs in education and skills provision. In particular the sub-group agrees that significant action is needed to reduce the disproportionate level of economically inactive people in NI and supports ANIC's conclusion that suitable education and skills development is at the heart of addressing this issue.

55. The sub-group was concerned to hear that colleges have had an £11m reduction in the current year's revenue budget and questions whether it is appropriate or sensible to make such a significant budget reduction as the colleges move through a key restructuring process. The sub-group agrees with ANIC that Government and a restored Executive should give careful

consideration to the consequences of budget squeezes though the sub-group accepts that this does not preclude a proper consideration of efficiency savings.

University and College Union (UCU)

56. UCU places emphasis on the need to match more effectively the skills needs of employers and individuals. Previous attempts at overall skills strategies have not been successful due to the lack of central co-ordination and direction. The Union underlines the importance of effective implementation of a skills strategy and suggests a mechanism such as the English Learning and Skills Council, which has strategic and executive powers.

57. Highlighting the fragmentation of current responsibilities for education and skills in NI, UCU argues that NI would be better served by having a single Government department, which has authority over all aspects of provision. In addition the Union argues that there is a case for a return to the use of a training levy applied to all employers to fund training and workforce development as determined by Sector Skills Councils constituted upon a statutory basis.

58. UCU then turns its attention to the skills needs of more traditional occupations and argues that training capacity and infrastructure must be improved to meet these needs. It argues that there is a need to have a workforce with a high level of generic skills that can adapt to changes in technology and production methods. UCU calls for a comprehensive skills strategy that must be articulated across the spectrum of economic activity, which involves the social partners, central and local government, further and higher education and which has a cross-border dimension.

59. The UCU submission sets the planned expansion in further and higher education against a backdrop of falling morale, relatively low pay and recruitment issues. It argues that the higher education sector should be accorded a central role in the implementation of a new skills strategy.

Rural Development Council (RDC)

60. In its submission, the RDC focused on the case for a rural economic development dimension to the design of an integrated education and skills strategy. There is a call for an appropriate rural proofed approach to education and training and for an integrated approach to development, linking opportunities for enterprise development with educational and skills development support.

61. RDC also advocates a move away from the use of grants to encourage structural change and prefers a more programmed approach within localised area development strategies. There is a plea for rates relief for some rural businesses and concern is expressed about the ongoing decline in the provision of essential rural services.

62. The submission surveys best practice in rural development from elsewhere in the UK, RoI and continental Europe. The sub-group notes that the message from these successful strategies is that structural change within rural NI is possible if all stakeholders are empowered, if innovation is encouraged and if support is sustained.

QUB/University of Ulster paper to the Economic Development Forum (EDF)

63. The sub-group has been provided with a copy of a paper prepared jointly by QUB and UU entitled 'The Current Economic Impact of the Northern Ireland Universities and Enhancing their Role in Future Economic Development' (Appendix 4). This was submitted in follow up to the evidence provided by EDF for the sub-group's second report. In addition to detailing the direct and indirect economic impact of the universities and their contribution to economic development, the paper proposes a range of additional investments and related actions to realise the potential of the universities in contributing to the development of a sustainable knowledge-based economy in NI.

64. The following are amongst the measures proposed, including associated costs:

- Strengthening the research base to deliver a world class, globally connected science base – £20m p.a.
- Increasing the number of postgraduate research students graduating from the NI universities each year by 200 per year – £10m p.a.
- Establishing industry led technology hubs and driving up Business Expenditure on Research & Development (BERD) over the next 5 years – £10m p.a.
- Improving the infrastructure to enhance and facilitate collaboration between business, universities and HE/FE – £4m p.a.

65. **The sub-group considers that the case for these proposals is well made and recommends that, in the context of developing an integrated skills and education strategy to support economic development, the Government should give careful consideration to the proposals from the two universities for additional investments and related actions to maximise their potential contribution to the development of a sustainable knowledge-based economy in NI**.

UUTech Ltd

66. UUTech Ltd provided evidence for the second report on an economic package and the sub-group welcomed this further written evidence for its third report.

67. The dominance of SMEs as a proportion of NI firms (98%) is highlighted in the submission, which seeks to address the skills needs of this sector and draws out some similarities with the requirements of multinational companies. This places a considerable expectation on universities/higher education to cater for a wide range of business requirements for trained and qualified staff.

68. The sub-group shares UUTech Ltd's view that NI's future prosperity will rely on the education sectors ability to produce "highly skilled and flexible workers, capable of thinking on their feet and adding value." The sub-group also concurs with the view that education/skills provision must be regularly reviewed to meet the current and future needs of business and in particular to provide new add-on skills in developing technologies e.g. nano-technology and bio-informatics. This approach will ensure that businesses remain capable of "trading-up the value chain" and ultimately remain competitive in the worldwide "knowledge economy".

69. UUTech Ltd recognises the increasingly mobile nature of multinational companies such as Nike and Dell. The sub-group agrees with the evidence provided on the need to constantly identify the changing needs of multinationals if we are to attract and retain their business. The sub-group accepts the UUTech Ltd argument on the need to produce more PhDs to satisfy the demand for advanced skill levels in such firms. The sub-group recommended in its second report that funding should be provided to produce more PhDs and to expand university capacity in NI.

70. The sub-group also agrees with UUTech Ltd on the importance of promoting and funding spin-off links between university research and business applications through technology transfer and patent exploitation etc.

71. **The sub-group concurs with much of the evidence from UUTech Ltd and recommends that Government and a restored Executive should carefully study the measures proposed by UUTech Ltd in its submission with a view to developing strategies to identify, resource and market university and FE college links to business both in NI and internationally**.

Part 4: - Water Reform

General Consumer Council for Northern Ireland

72. At the request of PfG Committee, the sub-group received written and oral evidence from the Consumer Council on 26 October 2006 on the issue of Water Reform, including the proposed draft Water and Sewerage Services Order. The sub-group agreed to take evidence in so far as it related to additional costs on business and to consider whether water charges should form part of its recommendations on an economic package.

73. The Consumer Council highlighted a number of key risks, and issues for consumers and business associated with the introduction of water charges.

74. In particular, the Consumer Council considered the draft Order to be fundamentally flawed and highlighted four key areas which require statutory guarantees if consumers are to be protected, particularly from 2010 onwards when they are expected to take on the full cost and risk of water and sewerage services. These include the following:

- Price protection against unacceptable risks such as inefficiencies in the new Go-Co, inability to pay the dividend to Treasury, bad debt, PPP contractual commitments, etc.;
- Centrally-funded ‘affordability tariff’ for those who genuinely cannot afford to pay;
- Land and assets valued at some £5.6bn must be managed and disposed of in the interest of consumers and taxpayers;
- The Utility Regulator’s powers and those of the Consumer Council must be fully independent and unfettered to ensure consumer protection.

75. The Consumer Council, therefore, called for the draft Order to be deferred until it is fully and independently assessed in the context of the other critical elements of water reform which are still under development and not within the public domain, such as: the licence, the strategic business plan and the ‘governance letter’.

76. The sub-group noted the Council's concern that the customers and businesses of today should not be expected to pay for past lack of investment and capital backlog. In addition, if the financial model underpinning the Go-Co is wrong then the costs will have to be met by consumers though higher bills or taxpayers through reduced public services in the future.

77. On the basis of this evidence, the sub-group recognised the strong case made by the Consumer Council for a delay in the water reform legislation, to allow more detailed consideration of the issues by a restored devolved administration. The sub-group therefore recommended to PfG Committee on 26 October that, as part of an economic package:

(a) The public services funding gap caused by a delay in the water reform legislation; and

(b) The capital backlog, or at least a significant percentage of it

be paid for by Government as additional funding.

78. The sub-group further recommended that the PfG Committee:

(a) Requests the Secretary of State to provide full details of the financial package agreed in 2005 between the Secretary of State and HM Treasury; and

(b) Considers commissioning an independent study to accurately determine the costs associated with a delay in the implementation of the water reform legislation.

79. PfG Committee considered the sub-group's recommendations on water reform at its meeting on 30 October 2006. In addition to supporting the recommendation relating to the economic package, PfG Committee agreed unanimously to write to the Secretary of State as recommended by the sub-group. PfG Committee referred the issue of an independent study on the costs of deferment back to the sub-group.

80. Having further considered the issue of water reform at its meeting on 13 November 2006, the sub-group agreed to modify and add to its recommendations as follows:

(i) The sub-group recommends that, as part of an economic package:

(a) The water reform legislation is deferred and dealt with as an NI Assembly matter.

(b) The public services funding gap caused by this deferment and the capital backlog, or at least a significant percentage of it, be paid for by Government as additional funding.

(ii) The sub-group further recommends that the Secretary of State commissions an independent study to accurately review all aspects of the water reform proposals during the deferment period.

Department for Regional Development (DRD)

81. Following the sub-group's consideration of the evidence from the Consumer Council, DRD made a written submission (Appendix 4). This aims to address some of the concerns expressed by the Consumer Council, including the issues in respect of fairness and affordability of tariffs, land disposal and the future ownership of the company. On the issue of the discrepancy in the Government's estimates for the funding gap caused by delaying the draft Order, DRD

explains that the different figures quoted refer to different time periods and confirms that the range of £130m to £180m represents an indicative estimate of the impact of delay until April 2008.

82. The sub-group welcomes the DRD submission and encourages the Department to address the outstanding issues directly with the Consumer Council. In the meantime, however, the sub-group reaffirms the above recommendations made to PfG Committee.

List of Abbreviations

ANIC	Association of Northern Ireland Colleges
BERD	Business Expenditure on Research & Development
DEL	Department for Employment and Learning
DRD	Department for Regional Development
ECIT	Electronics, Communications and Information Technology at Queen's University Belfast (QUB)
EDF	Economic Development Forum
ERINI	Economic Research Institute of Northern Ireland
FDI	Foreign Direct Investment
FE	Further Education
FSB	Federation of Small Businesses
GVA	Gross Value Added
HE	Higher Education
IDA	Industrial Development Agency
NIC ICTU	The Northern Ireland Committee, Irish Congress of Trade Unions
PfG	Preparation for Government Committee
QUB	Queen's University of Belfast
RDC	Rural Development Council
RoI	Republic of Ireland
R&D	Research and Development
SME	Small and Medium Enterprises
UCU	University and College Union
UU	University of Ulster

Appendix 1

Section 1: Minutes of Proceedings relating to the Report

Thursday, 26 October 2006 in Room 135, Parliament Buildings.

In the Chair:	David McClarty
Present:	Leslie Cree John Dallat Dr Alasdair McDonnell MP Mitchel McLaughlin David McNarry Sean Neeson Robin Newton Edwin Poots Kathy Stanton
In Attendance:	Shane McAteer (Clerk) Colin Jones (Assistant Clerk) Trevor Allen (Clerical Supervisor) Graham Gudgin (Economic Advisor)

The meeting commenced at 10.03am in closed session.

1. **Apologies**

Dr. Esmond Birnie
(Mr Cree attended the meeting as UUP representative in place of Dr Birnie).

David Ford.

Michelle Gildernew MP
(Ms Stanton attended the meeting as SF representative in place of Ms Gildernew).

Ian Paisley Jnr
(Mr Newton attended the meeting as DUP representative in place of Mr Paisley Jnr).

Margaret Ritchie
(Mr Dallat attended the meeting as SDLP representative in place of Ms Ritchie).

Peter Weir (Mr Poots attended the meeting as DUP representative in place of Mr Weir).

2. **Draft Minutes of Meeting on 3 October 2006**

These were agreed for publication on the Assembly’s website.

Mr McLaughlin joined the meeting at 10.05am.

3. **Matters Arising**

Members noted the reply from Maria Eagle, MP regarding the government's response to the sub-group's reports. Members agreed to write to the Secretary of State to express their dissatisfaction with the response and to press the Minister to meet with the sub-group as soon as possible after the publication of the sub-group's third report. It was agreed to include a recommendation in the draft third report to this effect.

Members noted the response from the Secretary of State to the Committee on the Preparation for Government regarding the quorum for sub-group meetings.

Mr McNarry joined the meeting at 10.07am.

Members noted the report from the Secretary of State on North/South economic collaboration via the British/Irish Inter-Governmental Conference.

Members noted DFP's response on public expenditure forecasts.

Members noted the instruction from the Committee on the Preparation for Government in relation to proceedings for today's meeting.

Members noted the advice from the Assembly Legal Service on sub-judice and the current judicial review on the consultation process regarding water reform.

Members agreed to seek an extension to the deadline for their third report until 13 November 2006, given that the ERINI research paper on corporation tax would not be available until 30 October 2006.

Mr Poots joined the meeting at 10.11am.

Members noted the Government's response to the recommendation contained in the Northern Ireland Affairs Committee Report in relation to the harmonisation of fuel duty.

4. **Written Submissions Received for Third Report**

Members noted the written submissions received in relation to the sub-group's third report and agreed that they should be included in the draft report.

5. **Evidence Session**

The meeting continued in open session at 10.20am.

The sub-group took evidence from Ms Eleanor Gill, Chief Executive and Mr Steve Costello, Chair, of the General Consumer Council for Northern Ireland.

Dr McDonnell joined the meeting at 10.22am.

Mr Newton left the meeting at 10.40am.

Members agreed recommendations in relation to water reform to be forwarded to the Committee on the Preparation for Government as follows:

'That the sub-group recognises the strong case made by the Consumer Council for a delay in the water reform legislation, to allow more detailed consideration of the issues by a restored devolved administration. The sub-group therefore recommends that, as part of a proposed economic package:

(a) the public services funding gap caused by a delay in the water reform legislation; and

(b) the capital backlog, or at least a significant percentage of it,

be paid for by Government as additional funding.'

'The sub-group further recommends that the Preparation for Government Committee:

(a) requests the Secretary of State to provide full details of the financial package agreed in 2005 between the Secretary of State and HM Treasury; and

(b) considers commissioning an independent study to accurately determine the costs associated with a delay in the implementation of the water reform legislation.'

The meeting continued in closed session at 11.20am.

6. **Preparation for Meeting with Chancellor on 1st November 2006**

Mr McNarry proposed that the meeting should continue in open session and be recorded by Hansard.

Ayes: Sinn Fein, UUP.
Noes: Alliance, DUP, SDLP.

The motion fell.

Dr McDonnell left the meeting at 11.35am.

Members noted that the political parties, as opposed to sub-group members, had been invited to meet with the Chancellor on 1st November, but that the sub-group's second report on the economic package would be a major feature in the negotiations.

Mr Dallat left the meeting at 11.52am.

The meeting was suspended at 11.52am.

The meeting resumed at 12.06pm.

Mr Newton joined the meeting at 12.06pm.

Mr Poots left the meeting at 12.06pm.

Mr Dallat joined the meeting at 12.06pm.

Members noted that DFP officials had been approached to update the sub-group but had declined to attend. It was agreed that this should be reported to the Committee on the Preparation for Government.

Victor Hewitt, Director of ERINI, updated members on ERINI's research in relation to corporation tax.

Dr McDonnell joined the meeting at 12.28pm.

Mr Dallat left the meeting at 12.28pm.

Members agreed the contents of a report to the Committee on the Preparation for Government in relation to today's proceedings. It was agreed that particular priority should be attached to establishing a discretionary legislative power for a restored devolved administration to vary corporation tax in Northern Ireland. It was also agreed that the need for major investment in infrastructure to support economic regeneration and sustainability was also a high priority.

It was also agreed that party delegations attending the meeting with the Chancellor should be offered a briefing on the sub-group's second report by the sub-group's officials and economic advisors and that a further briefing should be arranged in the House of Commons, prior to the meeting with the Chancellor. It was agreed that Victor Hewitt should be asked to attend both briefings.

7. **Any Other Business**

None.

8. **Date, time and Place of Next Meeting**

The next meeting of the sub-group was arranged for Thursday 9 November 2006 at 10.00 am to consider the sub-group's draft third report.

The meeting adjourned at 12.55pm.

Thursday, 9 November 2006
in Room 135, Parliament Buildings.

In the Chair: Jim Wells

Present: Leslie Cree
George Dawson
John Dallat
David Ford
Michelle Gildernew MP
Mitchel McLaughlin
David McNarry
Sean Neeson
Robin Newton
Margaret Ritchie

In Attendance: Alan Patterson (Principal Clerk)
Shane McAteer (Clerk)
Colin Jones (Assistant Clerk)
Trevor Allen (Clerical Supervisor)
Michael Smyth (Economic Advisor)

The meeting commenced at 10.04am in closed session.

1. **Apologies**

Dr. Esmond Birnie
(Mr Cree attended the meeting as UUP representative in place of Dr Birnie).

Dr Alasdair McDonnell MP
(Mr Dallat attended the meeting as SDLP representative in place of Dr McDonnell).

Ian Paisley Jnr
(Mr Newton attended the meeting as DUP representative in place of Mr Paisley Jnr).

Peter Weir (Mr Dawson attended the meeting as DUP representative in place of Mr Weir).

2. **Draft Minutes of Meeting on 26 October 2006**

These were agreed for publication on the Assembly's website.

3. **Matters Arising**

The Principal Clerk and Victor Hewitt, Director of ERINI, updated members on the preparations for and the outcome of the meeting with the Chancellor on 1 November 2006. It was noted that the Secretary of State was to write to party leaders with further details of the Chancellor's offer.

Members debated the outcome of the meeting with the Chancellor and the potential role which the sub-group could play in further negotiations.

Mr McNarry proposed that approval should be sought from the Committee on the Preparation for Government for the sub-group to provide a link between the political parties and the Government during negotiations on the economic package.

This was agreed unanimously, subject to an acknowledgement that such a role may instead be fulfilled by the Programme for Government Committee.

Members agreed to seek approval from the Committee on the Preparation for Government fro the sub-group to continue to meet to develop counter proposals to the economic package currently on offer.

Mr McNarry left the meeting at 11.06am.

Mr Newton joined the meeting at 11.10am.

Mr McNarry joined the meeting at 11.15am.

Ms Gildernew joined the meeting at 11.22am.

4. **Draft ERINI Research - 'Assessing the Case for a Differential Rate of Corporation Tax in Northern Ireland'**

Victor Hewitt, ERINI and Sir George Quigley, Industrial Task Force, briefed members on the above research. Members were informed that the research would be published on Wednesday 15 November 2006 and would be sent to the Committee on the Preparation for Government on that date as an appendix to the sub-group's third report.

The meeting was suspended at 12.03pm.

The meeting resumed at 12.20pm.

Members agreed a draft memo to the Committee on the Preparation for Government on the future role of the sub-group in relation to negotiations on the proposed economic package.

It was agreed that this would be circulated to sub-group members so that they could inform their respective party leaders.

Mr McNarry joined the meeting at 12.27pm.

Members noted the importance of the minutes of the meeting with the Chancellor and the need for these to be requested by the party leaders.

Mr Dallat joined the meeting at 12.28pm.

5. **Approval of Invoices from Economic Advisors**

Members approved payments to the economic advisors and agreed to seek approval from the Committee on the Preparation for Government to extend their contracts, should the remit of the sub-group be extended.

The sub-group discussed the desirability of commissioning external expertise on the economy in the Republic of Ireland if its remit were to be extended.

Mr Ford left the meeting at 1.20pm.

6. **Consideration of Sub-Group's Draft Third Report**

Members considered the sub-group's draft third report. It was agreed to meet again on Monday 13 November 2006 to consider the draft report, with a particular focus on the report's recommendations. Members agreed to send any proposed amendments or additional recommendations to the Principal Clerk by 5.00pm on Friday 10 November 2006.

7. **Matters Arising (cont)**

Members noted the response from the Committee on the Preparation for Government to the sub-group's report of their meeting on 26 October 2006, together with a submission from the Department for Regional Development.

It was noted that the recommendation in relation to water reform may need to be amended when the sub-group considers further the draft third report.

Members agreed to seek clarification from DRD on the relationship between water reform and borrowing under the Reinvestment and Reform initiative.

Members noted the response from David Hanson, MP regarding the Industrial Derating Working Group.

Members noted the response from the Secretary of State to the sub-group's first report and agreed that this would be considered at a future meeting.

8. **Any Other Business**

Members noted further correspondence from the Consumer Council.

9. **Date, time and Place of Next Meeting**

The next meeting of the sub-group was arranged for Monday 13 November 2006 at 1.00pm to consider the sub-group's draft third report.

It was agreed that an amended draft report would be issued to all nominated members in advance of the meeting.

The meeting adjourned at 1.45pm.

Monday, 13 November 2006 in Room 135, Parliament Buildings.

Unapproved Draft

In the Chair:	Jim Wells
Present:	Dr Esmond Birnie George Dawson David Ford Alban Maginness Mitchel McLaughlin David McNarry Sean Neeson Margaret Ritchie
In Attendance:	Alan Patterson (Principal Clerk) Shane McAteer (Clerk) Colin Jones (Assistant Clerk) Trevor Allen (Clerical Supervisor) Michael Smyth (Economic Advisor)

The meeting commenced at 1.02pm in closed session.

1. **Apologies**

Michelle Gildernew MP.

Dr Alasdair McDonnell MP
(Mr Maginness attended the meeting as SDLP representative in place of Dr McDonnell).

Ian Paisley Jnr.

Peter Weir (Mr Dawson attended the meeting as DUP representative in place of Mr Weir).

2. **Draft Minutes of Meeting on 9 November 2006**

These were agreed as amended for publication on the Assembly’s website.

3. **Consideration and Approval of Sub-Group’s Draft Third Report**

Members noted that a briefing from DFP on the economic package had been arranged for the political parties on Wednesday 15 November 2006.

Executive Summary

Paragraph 1 agreed subject to the following amendment:

that 'The sub-group had agreed to further examine the issues of skills training particularly in the context of developing a focus on Science and Technology as drivers of a sustainable economic recovery. However the necessity of preparing a detailed submission for the meeting with the Chancellor, Gordon Brown became an overriding priority,' be added as the second sentence.

Paragraph 2 agreed subject to the following amendment:

that 'written evidence be amended to read 'oral and written evidence' and

that 'devolve fiscal autonomy on corporation tax matters to a restored Executive,' be amended to read ' have a competitive rate of corporation tax with the possibility of other equivalent fiscal incentives.'

Paragraph 3 agreed subject to the following amendment:

that 'the costs of deferring water reform should form part of an economic package,' should be amended to read ' the water reform legislation should be deferred and dealt with as an NI Assembly matter and that the costs of such deferment should form part of an economic package.'

Paragraph 4 was agreed.

Paragraph 5 was agreed subject to minor amendment.

Paragraph 6 was agreed.

It was agreed that further paragraphs should be added to reflect the proposals put forward by the UUP.

Recommendations

Paragraph 1 agreed subject to the following addition:

That 'The sub-group believes that this is essential to provide an opportunity to question the Minister on the Secretary of State's response to its first report in his letter of 31 October 2006 ' be added at the end of the paragraph.

Paragraphs 2 –3 were agreed.

The sub-group agreed that two further recommendations should be added after paragraph 3 as follows:

'The sub-group recommends that there is a need for clarity over the future of education in N Ireland It further recommends that account should be taken of any strategic financial/policy implication which may arise out of the Bain Report.'

'The sub-group recommends that special attention should be given to science, technology and engineering as part of an integrated education and skills strategy.'

Paragraphs 4 –9 were agreed.

Paragraphs 10 and 11 were replaced with the following:

‘The sub-group recommends that, as part of an economic package:

(a) The water reform legislation is deferred and dealt with as an NI Assembly matter.

(b) The public services funding gap caused by this deferment and the capital backlog, or at least a significant percentage of it, be paid for by Government as additional funding.

The sub-group further recommends that the Secretary of State commission an independent study to accurately review all aspects of the water reform proposals during the deferment period.’

Introduction

Paragraphs 1–6 were agreed.

Paragraph 7 was amended to reflect the changes previously agreed to Recommendations, Paragraph 1.

Paragraphs 8 –13 were agreed.

Review of the Evidence presented to the Sub-group

Paragraphs 14 –20 were agreed.

Paragraph 21 was agreed, subject to minor amendment.

Paragraphs 22 –25 were agreed.

Paragraphs 26 –29 were agreed, subject to minor amendment.

Paragraph 30 was agreed.

It was agreed that two further paragraphs should be inserted to reflect the additions previously agreed following Recommendations, paragraph 3.

Paragraphs 31 –32 were agreed.

Paragraph 33 was agreed, subject to the following amendment:

That ‘and for more attention to be devoted to engineering and science throughout the education system from primary to tertiary levels’ be removed.

Paragraphs 34 –42 were agreed.

Paragraphs 43 –47 were agreed.

Paragraphs 48 –53 were agreed.

Paragraphs 54 –57 were agreed.

Paragraphs 58 –60 were agreed.

Paragraphs 61 –63 were agreed.

Paragraphs 64 –69 were agreed.

Paragraphs 70 –83 were agreed.

It was agreed that paragraphs 84 – 85 would be redrafted to reflect the changes previously agreed to recommendations, paragraphs 10-11.

Paragraphs 86 –87 were agreed.

It was agreed that the draft report as amended be the third report to the Committee on the Preparation for Government.

4. **Matters Arising**

Members noted the response from DRD in relation to water reform and the Reinvestment and Reform Initiative.

Members noted the memo sent to the Committee on the Preparation for Government, in relation to the extension of the sub-group's remit which had been agreed at the last meeting.

Members noted that any decision to extend the contracts of the economic advisors may need to be ratified by the Assembly's Senior Management Team.

Mr Dawson left the meeting at 2.13pm.

The meeting adjourned at 2.13pm as it was inquorate.

Appendix 1

Section 2: Correspondence on Procedural and Other Matters

Correspondence regarding sub-group quorum

From	**Debbie Pritchard** **Principal Clerk** **Committee on the Preparation for Government**
Date	**12 October 2006**
To	**Alan Patterson** **Clerk to the Sub-group on the Economic Challenges facing Northern Ireland**

CHANGE IN QUORUM FOR SUB-GROUP

Please find attached, a copy of a letter from the NIO confirming that the Secretary of State is content with the change in the quorum of the sub-group from seven members to five members, provided each party is represented, and a direction from the Secretary of State, which amends the earlier direction of 11 July 2006.

Debbie Pritchard

Debbie Pritchard
Ext 21233

Northern Ireland Office

Northern Ireland Office
Stormont Castle
Belfast BT4 3TT
Telephone 028 9037 8174
Facsimile 028 9037 8180
www.nio.gov.uk

Principal Private Secretary to the
Secretary of State for Northern Ireland

Nuala Dunwoody
Clerk to the Preparation for Government Committee
Room 28, Parliament Buildings
BELFAST
BT4 3XX

6 October 2006

Dear Nuala,

Thank you for your letter of 20 September, in which you seek confirmation that the Secretary of State is content with the Preparation for Government Committee's decision to make a reduction in the quorum of the economic sub-group subject to a proviso that at least one member of each of the five parties being present.

The Secretary of State takes the view that the provision in his 11 July 2006 direction is permissive rather than restrictive. It is therefore open to the Committee to impose a more restrictive requirement on its sub-groups than is proposed here under paragraph 7 of that direction. However, for the avoidance of doubt, he has signed the attached Direction to confirm that the provision in paragraph 5 of the 11 July Direction, which had concerned the Committee, is intended to apply <u>unless the Committee provides otherwise by consensus.</u>

Yours sincerely

SIMON MARSH
Principal Private Secretary

/YMcl

INVESTOR IN PEOPLE

Northern
Ireland
Office

NORTHERN IRELAND ACT 2006

DIRECTION DETERMINED BY THE SECRETARY OF STATE AND NOTIFIED UNDER PARAGRAPH 4(1) OF SCHEDULE 1 TO THE NORTHERN IRELAND ACT 2006

The Direction dated 11 July 2006 is amended as follows:

For paragraph 5 substitute: "Unless the Preparation for Government Committee provides otherwise by consensus, a subgroup may meet whether or not all party representatives are present."

SECRETARY OF STATE FOR NORTHERN IRELAND

DATE: 6 October 2006

Correspondence from Maria Eagle MP to Mr Wells regarding evidence sessions

Department of
Enterprise, Trade and Investment

NETHERLEIGH
MASSEY AVENUE
BELFAST
BT4 2JP
Tel: 028 90 529452
Fax: 028 90 529545
E Mail:private.office@detini.gov.uk

Mr Jim Wells MLA
c/o Room 414
Parliament Buildings
BELFAST
BT4 3XX

3 October 2006

Dear Mr Wells

Evidence to Assembly Sub-group on the economic challenges facing NI

Thank you for your 25 September letter inviting me to attend a further evidence session of the Economy Sub-Group.

It may be helpful to the Sub Group if I outline the action being taken by Government in response to its first report. We are currently considering each of the 21 recommendations with a view to providing a written response as soon as possible. However the recommendations in your first report are wide-ranging and they require consultation both in NI and at UK level. Consequently, Government's written response will not be available before 5 October. In light of that, I do not believe that it would be practicable or, more importantly, productive for the Sub Group, for me to give further oral evidence relating to your first report on 5 October.

Moreover, I am conscious that the Sub Group is due to bring forward further reports on 4 and on 23 October. It seems likely that these will touch on and elaborate at least some of the recommendations in your first report. Government will therefore need to consider the implications of your second and third reports for its response to your first report, which may therefore be preliminary in some respects.

As regards education and skills initiatives, I would welcome a more specific indication of the matters on which the Sub-Group considers it needs further information.

In light of the foregoing comments, I must respectfully decline your invitation to appear at a further oral evidence session of the Sub-group on 5 October. However, I would again underline the importance that Government attaches to the work of the

Sub-group. I would therefore suggest that the most constructive next step is for the Sub Group to consider Government's response to your first report, which will be provided as soon as practicable. In the meantime, I have asked that officials should continue to provide the Sub Group with whatever factual information that is currently available on issues of interest to it.

I hope that you find this information and suggestion helpful.

Yours sincerely,

Maria Eagle

MARIA EAGLE MP

Correspondence regarding North/South economic collaboration through the British/ Irish Intergovernmental Conference (BIIGC)

Northern Ireland Office

Northern Ireland Office
Stormont Castle
Belfast BT4 3TT
Telephone 028 9037 8176
Facsimile 028 9037 8180
www.nio.gov.uk

Secretary of State for Northern Ireland

Shane McAteer
Clerk
Sub-Group on the Economic Challenges facing Northern Ireland
Preparation for Government Committee
Room 428
Parliament Buildings
BELFAST
BT4 3XX

18 October 2006

Dear Mr McAteer,

REPORT ON NORTH/SOUTH ECONOMIC COLLABORATION THROUGH THE BRITISH IRISH INTERGOVERNMENTAL CONFERENCE (BIIGC)

Thank you for the letter of 15 September 2006 from Naomi Long requesting a full report and details of the Government's work on North/South economic collaboration through BIIGC. The Conference has progressed a number of initiatives over recent meetings of which a number remain live issues. The details are contained in the attached report.

THE RT HON PETER HAIN MP
Secretary of State for Northern Ireland

/TW

INVESTOR IN PEOPLE

REPORT ON NORTH/SOUTH ECONOMIC COLLABORATION THROUGH BIIGC

Comprehensive Study on All Island Economy

In early February this year the Conference noted the scope for opportunities for further practical co-operation on the development of a more competitive and prosperous all-island economy for the benefit of all, including businesses and consumers North and South. It agreed that a comprehensive study should be undertaken to identify areas where future co-operation would deliver mutual benefits and examine how such co-operation might best be taken forward. The Conference also asked that this work should also draw on the common contribution by the British and Irish Governments under the Revised Lisbon Strategy.

The Conference in May reviewed progress and welcomed the involvement of the business community in the study. It was agreed that the initial focus of the study work would be on the potential for further co-operation around the areas of science, technology and innovation; labour market skills; enterprise and business development; and trade and investment promotion. A more detailed progress report was tabled at the meeting of the Conference in July which focused on economic issues and agreed that the development of a more competitive and prosperous all-island economy would remain a priority for both Governments in the period ahead. At that meeting the Conference also:

- agreed an all-island approach to labour market skills forecasting – recognising that a skilled workforce will be a key resource for a globally competitive all-island economy, and agreed to work together to identify skills gaps and propose how these should be addressed;
- agreed a new all-island approach to international collaboration in science and technology – including taking advantage of EU funds which can be jointly accessed on an all island basis to significantly enhance the opportunities for companies to collaborate on research and development;
- agreed an all-island approach to business development through knowledge exchange – including an all-island conference in the autumn to kick start a new

joint approach to business development and collaboration through networks and clusters;

- noted the appointment of the expert consultants to assist with the comprehensive study on the all-island economy and reviewed progress on the study; and
- agreed that the final report due to be made at the next Conference should be comprehensive and ambitious with proposals for specific actions and initiatives.

Joint Trade Promotion

The Conference in February this year also welcomed the initiative by the Irish Government to include Northern Ireland businesses in the trade delegation accompanying the Taoiseach to India in January 2006. The Conference agreed that further opportunities for joint trade promotion would be explored as part of the comprehensive study on the all island economy. It was subsequently agreed at the July Conference to pool resources in trade promotion by opening all trade missions to companies across the island and making the facilities of Invest NI and Enterprise Ireland oversees offices available to all companies on the island.

North West Gateway Initiative

At the Conference in February this year the two Governments, recognising that both of them faced many of the same challenges either side of the border in the North West of the island, made a commitment to explore ways in which they could more closely co-operate to maximise the potential of the region. They welcomed the work underway to identify potential interventions that might be undertaken on a North/South basis.

In May the Conference approved a new cross-border North West Gateway Initiative, to include:

- a non-statutory integrated spatial planning and development framework focusing on the Derry-Letterkenny gateway and the four local councils areas of Derry, Strabane, Limavady and Donegal;
- an examination of the potential for joint investment in key infrastructure projects;

- joint analysis and actions by agencies in areas such as trade and investment promotion, tourism, skills/training, further and higher education, innovation and business development; and
- better co-ordination of public services, notably in health, education and information services.

In drawing up programmes under the new round of EU structural funds the two Governments agreed to give due consideration to the particular needs of the North West whilst recognising that any public expenditure would be subject to normal scrutiny procedures in each jurisdiction. The Conference agreed to consider a further report on progress within the following six months.

Renewable Energy

At the May Conference the development of sustainable energy on an all-island basis was discussed, including progress on a 2020 Vision for renewable energy; the commencement of a study into how renewable energy technologies might be accommodated in grid systems; and the development of an integrated, all-island communications strategy on sustainable energy and energy efficiency. At the Conference in July, the two Governments agreed to work together to maximise the contribution of renewable and sustainable energy to the future energy needs of the island and reaffirmed their commitment that nuclear power stations will not be built on the island of Ireland.

Single Electricity Market/All-island Energy Market

On 27 June 2005 the Conference noted the meeting of Ministers to review progress on the all-island energy market and welcomed the ongoing work to create a single electricity market by July 2007. On 19 October 2005 the Conference reiterated its commitment to a single wholesale electricity market by July 2007 and confirmed that every effort would be made to facilitate the introduction of the necessary legislation in both jurisdictions. Work is continuing on the draft legislation and it is now anticipated that SEM will be operational by November 2007.

Mobile roaming charges

The Conference in October 2005 welcomed the meeting between Ministers and representatives of all mobile phone operators to discuss greater co-operation on mobile telecoms issues and, in particular, to address the issue of inadvertent mobile roaming charges between Ireland and Northern Ireland. At the Conference in February 2006, the two governments reiterated their determination to resolve the problem of inadvertent mobile phone roaming in border areas and welcomed the work being done by the relevant Ministers with the Regulators and operators. It was also noted that a report from the Regulators was due before the end of March 2006 which it was hoped would lead to concrete actions by mobile operators to address the problem.

At the May Conference, both Governments welcomed the introduction of all-island tariff options by a number of mobile phone companies and highlighted the positive results of the two Governments' co-operation in tackling mobile roaming charges on the island as a clear example of practical co-operation of real benefit to consumers and businesses North and South. The Conference noted, however, that there was more work to be done and agreed to ask the Regulators to continue working with the companies and report back.

Infrastructure/Spatial Planning

In June 2005, the Conference discussed the significant potential for effective co-operation for mutual benefit on strategic issues such as infrastructure development and spatial planning. It was agreed that the modalities of taking forward such co-operation would be explored with a view to a further discussion at a future meeting of the conference.

In February 2006, the Conference discussed a joint paper on infrastructure and spatial planning on the island. The Conference commended the wide-ranging and successful co-operation already underway in sectors such as health, energy, telecoms, transport and waste management infrastructure. The Conference agreed that there was significant potential for further co-operation on a range of infrastructure and spatial planning issues and requested that responsible Departments and Agencies/Regulators identify further projects for North/South co-operation and bring these forward.

The Conference in May discussed progress and noted the forthcoming formal launch of the report from the International Centre for Local and Regional Development (ICLRD) on spatial strategies for the island of Ireland. The Conference welcomed this work and endorsed its recommendation for the development of a framework for collaborative action between the two spatial planning strategies on the island. Relevant Government Departments, together with other key stakeholders, are to take forward the preparation of the new collaborative framework and update the forthcoming Conference on the 24 October.

SUB-GROUP ON THE ECONOMIC CHALLENGES FACING NORTHERN IRELAND

Parliament Buildings
BELFAST
BT4 3XX

Date: 15 September 2006

The Rt Hon Peter Hain MP
Secretary of State for Northern Ireland
Stormont Castle
Stormont Estate
Belfast
BT4 3TT

Dear Secretary of State,

I am writing on behalf of the Committee on the Preparation for Government sub-group on the economic challenges facing Northern Ireland. The sub-group, at its meeting on Thursday 14 September 2006, passed a motion that it:

"Request that the Secretary of State should provide a full report and details of the government's work on North/South economic collaboration through the British Irish Intergovernmental Conference."

(The motion was proposed by David McNarry MLA and was agreed on a 3 to 2 majority).

I should be grateful for an early response to this request as the information is relevant to the urgent work on which this sub-group is engaged.

I would be grateful if your reply could be sent care of the Clerk of the sub-group, Mr Shane McAteer, Room 428, Parliament Buildings (shane.mcateer@niassembly.gov.uk).

Yours sincerely

Mrs Naomi Long MLA
Chairperson

Correspondence from DFP regarding public expenditure forecasts for Northern Ireland

From the Second Permanent Secretary
Bruce Robinson

Rathgael House
Balloo Road
BANGOR, BT19 7NA

Tel No: 028 9185 8001
Fax No: 028 9185 8184
E-mail: bruce.robinson@dfpni.gov.uk

Mr Alan Patterson
Principal Clerk,
Sub-Group on Economic Challenges
Northern Ireland Assembly
Parliament Buildings
BELFAST
BT4 3XX

5th October 2006

Dear Alan

Public Expenditure Forecasts for Northern Ireland

Mr Francie Molloy, MLA wrote to me on the 26th September 2006 seeking information on public expenditure allocations to both Northern Ireland and the UK generally to the end of the present decade.

As you are aware, there are no confirmed public expenditure allocations for Northern Ireland beyond 2007 – 2008. The ongoing national Comprehensive Spending Review (CSR) will determine Northern Ireland's public expenditure allocation, via the Barnett Formula, for the 2008-09 to 2010-11 period.

DFP officials have been analysing the Chancellor's March 2006 Budget announcement on the fiscal position to determine possible trends in public expenditure allocations over the CSR period. The table below provides some preliminary estimates of public expenditure expectations for both Northern Ireland and the UK over the CSR period. You will appreciate that these are unofficial estimates based on a number of assumptions.

Table – Northern Ireland/UK Public Expenditure 'Forecasts'* (real terms)

	2008/09	2009/10	2010/11
Northern Ireland DEL (% increase on preceding year)	0.8	0.9	1.0
UK DEL Growth (% increase on preceding year)	1.0	1.1	1.2

**Assumptions include GDP deflator 2.7% per annum*

These growth rates refer to Department Expenditure Limit (DEL) allocations only (therefore excluding Annually Managed Expenditure (AME) which is essentially demand-led such as social security payments). DEL allocations account for approximately half of total Government expenditure within Northern Ireland. It should also be noted that the percentage growth rates presented in the table are expressed in real terms.

I hope you find this information of help. If you have any further queries on this issue please contact Michael Brennan (ext 68151) in the first instance. In concluding I would just reiterate that these are somewhat crude, unofficial estimates of likely allocations.

Yours sincerely

Bruce Robinson

Memo to PfG for extension of time for report

MEMO

From: **David McClarty**
Chairperson Economic Sub-group

Date: 26 October 2006

To: Preparation for Government Committee

Extension to Deadline for Economic Sub-group Third Report

At its meeting on 26 October 2006 the sub-group agreed to request an extension to its deadline from 30 October to 13 November 2006 to submit its third report to PFG.

The sub-group has been advised by the Economic Research Institute for Northern Ireland (ERINI) that a key research project on the costs of reducing corporation tax will not be available until 30 October. The sub-group want to include this research in the report, supported by an analysis commissioned from its economic advisers. This research will be central to the sub-group's third report, as it will provide the cost information required by government on the revenue consequences of a reduced rate of tax.

At its meeting on 26 October, the sub-group received an advance briefing on the research outcomes from the Director of ERINI, Victor Hewitt. PfG has asked the sub-group to prepare a consensus approach on the content of a potential economic package in advance of the meeting with the Chancellor of the Exchequer on 1 November. The ERINI briefing provided invaluable information in support of the case for fiscal variation and underpinned the consensus reached by the sub-group in its second report on the economic package, which included a recommendation in favour of a more competitive rate of corporation tax.

The sub-group also arranged to take oral evidence on 26 October from the Consumer Council on water charges as requested by PfG, and will consider whether this evidence could be deployed as part of the case for an economic package. The sub-group changed its planned agenda for the 26 October following the request from PfG and will need further time to complete its report and consider the ERINI research. It is the view of the sub-group that an extension of the reporting deadline to 13 November 2006 is appropriate and reasonable.

I should be grateful for PFG's urgent consideration of this request.

David McClarty, MLA
Chairperson

Correspondence with David Hanson MP regarding the Industrial Derating Working Group

Sub-group on the economic challenges facing Northern ireland

Parliament Buildings
BELFAST
BT4 3XX

Date: 22 September 2006

David Hanson MP
C/o OFMDFM Private Office
Room A5.03
Castle Buildings
Stormont Estate
Belfast
BT4 33SR

Dear Mr Hanson

Thank you for your response of 18 September 2006 (COR 218/2006) containing information on the arrangements for the Industrial Derating Working Group.

Your correspondence was considered by the sub-group at its meeting on 21 September 2006. Members agreed that I should seek more information on the frequency of meetings planned for the Group. You may also be aware that the sub-group must make its final report to the Committee on the Preparation for Government by Monday 23 October. The potential phasing out of industrial derating is an important issue for the sub-group and Members would therefore be grateful if the interim conclusions from your Working Group could be made available to us in time for our meeting on Thursday 12 October 2006 to inform the consideration of our draft report.

I would be grateful if your reply could be sent care of the Principal Clerk of the Sub-group, Mr Alan Patterson, Room 414, Parliament Buildings or e-mailed to (alan.patterson@niassembly.gov.uk).

Yours sincerely

Mr David McClarty MLA
Chairperson

Department of
Finance and
Personnel

Craigantlet Buildings
Stoney Road
Belfast BT4 3SX
Telephone 028 9052 9140
Facsimile 028 9052 3600

Our Ref: COR/217/2006

Mr David McClarty MLA
c/o Mr Alan Patterson
Room 414
Parliament Buildings
BELFAST
BT4 3XX

16th **October 2006**

Dear David,

Thank you for your letter dated 22 September in which you set out some queries in relation to the Industrial Derating Working Group

Your letter asks for more information on the frequency of Working Group meetings. The first meeting of the Group took place on the 18 September 2006. The date for the next meeting has been set for Tuesday 17 October. The Working Group has agreed, however, that members of the NIMFG should be able to meet with Departmental officials outside of the main meetings to discuss in more detail any issues that have been raised. These have been occurring on an ongoing basis and are likely to continue to up until the time of the final meeting of the Working Group, which will be scheduled for some time in November.

In your letter, you also ask if there are any interim conclusions which may be available from the Working Group in order to inform your final report for the Committee on the Preparation for Government. I do recognise that the issue of industrial derating is an important one in relation to this report. However, the gathering of evidence to inform the work of the Group is still at a preliminary stage and it is unlikely that the Working Group will have reached any conclusions, even at an interim level, by the time that you have specified.

[redacted]

I have however copied to you a letter which has been sent to both the NIMFG and Amicus representatives on the Working Group. This letter identifies some of the main issues which have arisen through discussions in the Group and which are now being explored in more detail. I hope this will provide you, at least, with an indication of the some of the issues which the Group is focusing on.

DAVID HANSON MP
Minister of State for Northern Ireland

[redacted]

Department of
Finance and
Personnel
www.dfpni.gov.uk

Craigantlet Buildings
Stoney Road
Belfast BT4 3SX
Telephone 028 9052 9140
Facsimile 028 9052 3600

Mr Basil McCrea
Spokesman NIMFG and AMICUS
Unit 39a
Old Coach Road
Hillsborough
Co Down
BT26 6PB

Our Ref: INV 122/06

5 **October 2006**

Dear Mr McCrea,

Thank you and your AMICUS colleagues for the contribution made so far to the working group and for the position paper you submitted in advance of our last meeting.

I found the meeting to be a useful one in setting the scene. Clearly, we will not get to the bottom of this important issue in the time we have available but I think it will serve to identify the main areas of concern in advance of the formal review.

Since then I believe you have had a useful first meeting with officials (with another planned today) and discussed a range of avenues for further exploration, such as the cost of doing business study, the experience of Scotland, feedback from Invest NI investor visits, the issue of Selective Financial Assistance (to explore the reasons behind the apparent shift away from manufacturing) and the issue of State Aid. I understand these matters are being followed up with DETI and I look forward to hearing the results of this work.

Could I also suggest a focus on the revenue implications and NIMFGs thoughts on how the budget deficit can be handled, if the government did decide there was compelling evidence to merit an easement with the policy.

[redacted]

I look forward to examining the case studies you offered to provide and should be grateful if this information could be provided within the next few days in advance of our meeting on the 16th October

Finally, can I thank you for manner in which you are engaging with government on this important issue and for your recognition of the need to provide firm evidence in support of your cause.

Yours sincerely,
Joanna Calitto
pp. **DAVID HANSON MP**
Minister of State for Northern Ireland

[redacted]

Report to the Preparation for Government Committee on the sub-group meeting on 26 October 2006

From **Shane McAteer**
Clerk
Sub-group on Economic Challenges facing Northern Ireland

To **Christine Darrah**
Clerk
Preparation for Government Committee

Date 27 October 2006

Sub-Group Meeting on 26 October 2006

I refer to your memo of 24 October 2006. This outlined PfG Committee's instruction to the sub-group to carry out preparatory work for the meeting between representatives of the political parties and the Chancellor on 1 November 2006, and to establish as much consensus as possible on the key issues to be raised. In addition, the sub-group was asked to take oral evidence from the Consumer Council on the water reform proposals and to report on both issues for the PfG Committee's meeting on Monday 30th October 2006.

The sub-group carried out preparatory work as requested at its meeting on 26 October 2006. Members reaffirmed the recommendations contained in the sub-group's second report to PfG Committee (i.e. the report on the economic package/peace dividend) and attached particular priority to establishing a discretionary legislative power for a restored devolved administration to vary corporation tax in Northern Ireland. The sub-group also attached high priority to the need for major investment in infrastructure to support economic regeneration and sustainability.

By way of further preparation, the sub-group also agreed that its officials and economic advisers, together with Victor Hewitt, Director of ERINI, should offer a briefing on the recommendations contained in its second report to party delegations attending the meeting with the Chancellor on 1 November. This will reinforce the consensus outcome reflected in the all-party agreement to the recommendations in the second report. The briefing will take place on Monday 30 October at 1.00pm in Room 135 and a written Question & Answer brief will also be provided. It was also agreed that a further pre-brief would take place on 1 November at 3.30pm in the House of Commons (Committee Room 17) prior to the meeting with the Chancellor. The sub-group members agreed to inform the relevant members of their parties of these arrangements.

As instructed, the sub-group also took evidence from the Consumer Council on the proposed water reforms. Both the written evidence submitted and the official report of the evidence session will be included in the sub-group's third report. However, on the basis of the evidence provided, the sub-group agreed to report the following conclusion and recommendations to PfG Committee:

'That the sub-group recognises the strong case made by the Consumer Council for a delay in the water reform legislation, to allow more detailed consideration of the issues by a restored devolved administration. The sub-group therefore recommends that, as part of a proposed economic package:

(a) the public services funding gap caused by a delay in the water reform legislation; and

(b) the capital backlog, or at least a significant percentage of it be paid for by Government as additional funding.

The sub-group further recommends that the Preparation for Government Committee:

(a) Requests the Secretary of State to provide full details of the financial package agreed in 2005 between the Secretary of State and HM Treasury; and

(b) Considers commissioning an independent study to accurately determine the costs associated with a delay in the implementation of the water reform legislation.'

On a separate issue, the sub-group agreed that it should apprise PfG Committee of the difficulties which it continues to face as a result of the constraints placed on departmental officials on their ability to offer departmental views on a preferred economic package and on fiscal preferences. In pursuance of a suggestion made at PfG Committee that DFP officials could ensure that the sub-group was updated on developments prior to the meeting with the Chancellor, an informal approach was made to DFP officials for briefing. However, this was refused on the basis of a potential conflict of interest, which is in line with correspondence from the Secretary of State to the sub-group, dated 18 September 2006, regarding access to DETI officials. Whilst the sub-group recognises the constitutional constraints that bear on officials who are advising Ministers, the absence of input on these key areas has inhibited the work of the sub-group.

Shane McAteer
Ext 21843

Memo from PfG Committee regarding the report of the sub-group meeting on 26 October 2006

From: Christine Darrah
Clerk
Preparation for Government Committee

Date 6 November 2006

To Alan Patterson
Principal Clerk
Sub-group on Economic Challenges facing Northern Ireland

Report of Sub-Group Meeting on 26 October 2006 and Request for Extension of Deadline for Sub-Group Third Report

At its meeting on 30 October, the Committee on the Preparation for Government considered the report from the Clerk to the sub-group regarding the meeting on 26 October 2006.

The Committee supported the recommendation of the sub-group that, as part of a proposed economic package:

a. the public services funding gap caused by a delay in the water reform legislation; and

b. the capital backlog, or at least a significant percentage of it

be paid for by Government as additional funding.

Following a discussion the Committee also agreed unanimously:

- To write requesting full details of the financial package agreed in 2005 between the Secretary of State and HM Treasury.
- That the sub-group should take forward the recommendation to consider commissioning an independent study to accurately determine the costs associated with a delay in the implementation of the water reform legislation.

The Committee also noted the letter from the sub-group Chairperson dated 26 October 2006 and acceded to the request for an extension of the deadline from 30 October to 13 November 2006 to submit the sub-group's third report.

Christine Darrah
Ext 2162

Correspondence with the Secretary of State regarding Minister's attendance

Sub-group on the Economic Challenges Facing Northern Ireland

David McClarty, MLA
Parliament Buildings
BELFAST
BT4 3XX

Date: 7 November 2006

The Rt Hon Peter Hain MP
Secretary of State for Northern Ireland
Stormont Castle
Stormont Estate
Belfast
BT4 3TT

Dear Secretary of State,

At its meeting on 26 October 2006, the Assembly sub-group on the economy considered a reply from the Minister, Maria Eagle, MP, dated 3rd October 2006 (copy attached), concerning Government's response to the sub-group's first report. Members agreed that I should write to you to express their frustration at the delay in receiving a Government response to a report that was published in early September 2006.

In her reply, the Minister states that a written response to the first report will be issued 'as soon as is practicable'. The sub-group has also invited the Minister to meet with it as soon as possible after its third report has been published to discuss the Government's comprehensive response to all 3 reports. The third report will be presented to the Preparation for Government Committee for consideration at its next meeting on 15 November. The sub-group have asked me to express its firmly held view that the Minister should meet with it shortly thereafter to present the Government's considered responses.

The sub-group would welcome an indication of when a written reply to its first report might be expected and an assurance that the Minister will present the Government's responses to all three reports at a meeting of the sub-group to be arranged as soon as possible after the third report is published by PfG.

Yours sincerely

Mr David McClarty MLA
Chairperson

Advice from the Department of Enterprise, Trade and Investment on the practical implications of the Azores Judgement

Department of
Enterprise, Trade and Investment
www.detini.gov.uk

From: Graeme Hutchinson
Economics Division

Date: 3 October 2006

To: Alan Patterson

SUBJECT – ADVICE ON THE PRACTICAL IMPLICATIONS OF THE AZORES CASE

1. Jim Wells noted in his 18 September letter to the Secretary of State, in relation to the issue of the rate of Corporation Tax in Northern Ireland, that advice would be welcomed on the practical implications of the recent Court of Justice of the European Communities judgement on the case between the Commission and the Portuguese Republic (the Azores case).

2. Please find attached at Annex A advice that has been received from the Departmental Solicitor's Office.

3. I hope you find this information useful.

(signed)

GRAEME HUTCHINSON

ISSUE: **Practical Implications for Northern Ireland of the Azores ruling (Portugal v Commission of the European Communities Case C-88/03).**

1. This is an important decision of a constitutional nature heard by the Grand Chamber of the European Court of Justice.

2. In it the ECJ found against Portugal in respect of the legislative measure of the regional Assembly of the Azores which affected substantial reductions in the rate of income and corporation tax, where Portuguese law also provided a corollary provision which was inextricably linked to the former and created a duty of national solidarity to correct inequalities between the regions by ensuring a continuing appropriate level of public services and private activity.

3. Nevertheless the ECJ accepted the essence of the UK intervention to the effect that a decision:

   - taken by a politically and administratively separate regional authority;
   - adopted in the independent exercise of that authority's powers without central intervention; and
   - where the financial consequences of the decision are not offset by aid or subsidies from the centre or other regions

   does not create a notifiable regional state aid and therefore does not require to be cleared with the European Commission.

4. To enable a Northern Ireland administration to utilise devolved powers in a manner compatible with the Judgement:

   - appropriate powers would require to be devolved to a local Assembly;
   - the Assembly would have to choose to exercise these powers; and
   - the financial relationship between the Northern Ireland administration and the rest of the UK would have to be such that the economic consequences of such a decision were, in the terms of the Judgement,

     "not … offset by aid or subsidies from other regions or central government.

     It follows that political and fiscal independence of central government which is sufficient as regards the application of Community rules on state aid presupposes, as the United Kingdom Government submitted, that the infra-State body not only has power in territory within its competence to adopt measures to reducing the tax rate, regardless of any considerations related to the conduct of the central State, but that in addition it assumes the political and financial consequences of such a measure."

5. The intervention of the United Kingdom in the Azores case was intended to create the space within Member States for the effective operation of devolved

powers of taxation where a system of asymmetrical devolution such as exists in the United Kingdom pertains. However, the UK's intervention did not in any way prejudge whether it would be regarded as appropriate to devolve such powers. Nor did it require the UK to be explicit about mechanisms between the different jurisdictions of the United Kingdom which would be sufficient to reflect the requirement for autonomy that the Court prescribed as necessary.

6. Ultimately, if devolved powers over taxation akin to those considered in the Azores Case were to be devolved, it would be HM Treasury which would be responsible for designing the appropriate mechanisms to meet the requirements of the judgement.

Response from the Secretary of State to the sub-group's first report

Northern Ireland Office

Northern Ireland Office
Stormont Castle
Belfast BT4 3TT
Telephone 028 9037 8176
Facsimile 028 9037 8180
www.nio.gov.uk

Secretary of State for Northern Ireland

Jim Wells MLA
Parliament Buildings
Belfast
BT4 3XX

31 October 2006

Dear Jim,

THE COMMITTEE ON THE PREPARATION FOR GOVERNMENT'S 1ST REPORT ON THE ECONOMIC CHALLENGES FACING NORTHERN IRELAND

As I indicated in my 18 September letter, I am very pleased that the Economic Sub-group has made such excellent progress in addressing its terms of reference.

My Ministerial colleagues and I have considered the recommendations in the 1st report and Government's response to its recommendations is attached. As I am sure you will appreciate, in many cases we are offering a preliminary view, bearing in mind that work is ongoing in relation to several of the recommendations. Also, in certain other cases our definitive response can only be determined in the context of the ongoing Comprehensive Spending Review.

I trust that the Sub-group will find this response helpful.

Finally, I would acknowledge that Government has also received the 2nd report and that a response to it will issue as soon as practicable. I also await the 3rd report with interest.

THE RT HON PETER HAIN MP
Secretary of State for Northern Ireland

/IW

INVESTOR IN PEOPLE

Department of
Enterprise, Trade
and Investment
www.detini.gov.uk

GOVERNMENT RESPONSE TO THE COMMITTEE ON THE PREPARATION FOR GOVERNMENT'S 1ST REPORT ON THE ECONOMIC CHALLENGES FACING NORTHERN IRELAND

Recommendation 1

The sub-group agreed to include all the submissions and presentations received in its report and recommends that PfG and the Secretary of State and his Ministers should study the evidence carefully. There is much quarry for further work in the material submitted.

Government welcomes the extensive volume of evidence gathered by the Economic Sub-group from a bróad range of key stakeholders and agrees that it merits careful examination.

Recommendation 2

That the current level of Public Expenditure should be protected during a transitional period agreed with Treasury to allow competitive fiscal incentives and targeted investment to rebalance the economy towards high value added Foreign Direct Investment (FDI) and indigenous companies.

There are no plans to reduce the level of public expenditure across the UK and the ongoing Comprehensive Spending Review will give Northern Ireland a settled allocation running through until March 2011. When devolution is restored, it will be for the Assembly to allocate Northern Ireland's public expenditure budget across the various functions of Government according to its own priorities.

As the Sub-Group's report highlights, a key economic challenge going forward is to reduce NI's over dependence on public expenditure and create a more vibrant, profitable private sector. The latest available figures show that Government spends some 30% more on a per head basis in Northern Ireland than the UK average. In 2006/07 public expenditure in Northern Ireland (Departmental Expenditure Limit) will be some £8.19 billion and this will increase to £8.57 billion in 2007/08.

Department of
Enterprise, Trade
and Investment
www.detini.gov.uk

Recommendation 3

That the Business Investment Programme budget is reviewed and additional resources made available to finance grant aid, targeted at business actively engaged in collaborative R&D activity with universities, multinationals and other partners.

Under the current Comprehensive Spending Review, all budgets are being examined to ensure they are being utilised effectively. This includes an assessment of the Invest NI budget and, in particular, the effectiveness of Selective Financial Assistance granted to indigenous and foreign owned businesses in Northern Ireland. The mechanisms through which Invest NI is financed are also under review. In line with the goals of the Economic Vision and the forthcoming Regional Economic Strategy, it is recognised that collaborative R&D activity by businesses with universities, multinationals and other partners is a priority area. This is also recognised in the Budget 2006-08 Skills and Science Funding Package which, amongst other measures, is providing additional resources to assist the transfer of science and technological research into the marketplace.

Recommendation 4

That the role, structure and functions of Invest NI (INI) be reviewed to determine if it is delivering effectively on its core objectives and is fit for purpose.

Invest NI's role is to develop the Northern Ireland business base, thereby increasing its contribution to economic growth. Essentially this is to be achieved by assisting the formation of new, and the development of existing businesses, within Northern Ireland.

The recently published Invest NI Performance Report (http://www.investni.com/index/about/ab-reports-n-publications.htm) highlights a number of key achievements. For example, in its first three years, Invest NI levered more than £1.1billion private sector investment into the Northern Ireland economy. There is also evidence that Invest NI clients are now more export focused; and there

Department of
Enterprise, Trade and Investment
www.detini.gov.uk

EDF's Skills Sub-group, better lines of communication are being established between business and Government. Another component of FE Means Business is a revision of the FE Curriculum to ensure that it focuses on the needs of employers and on the development of employability skills. In addition, development of enterprise and entrepreneurship skills is currently being included as an integral part of the curriculum for students in further education colleges. With regard to creating an enterprise culture in our schools, employability is one of the key themes running throughout the revised curriculum at primary and post primary level. This will place a greater focus on the development of enterprise and entrepreneurship skills for our young people. Also through the Skills and Science Fund, the Vocational Enhancement Programme (VEP) has been extended. This programme enables schools, working with further education colleges, to introduce professional and technical subjects into the curriculum. VEP is supporting the full introduction of the Curriculum Entitlement Framework which requires young people aged 14-19 in schools to be offered at least ⅓ of their curriculum in professional and technical subjects. In addition, the proposed new programme – "Training for Success" – and the extension of the Apprenticeship Programme together with the introduction of a pre-apprenticeship programme will better address the skill needs of employers.

There is, however, much to be done if NI is to be seen as an exemplar region in terms of our commitment to service, innovation and R&D and if this is to become a trigger for further leading edge investment. This theme is also picked-up in the Preparation for Government Committee's second report.

The level of public sector investment in professional and technical (vocational) training, skills and R&D will be determined in the context of the Comprehensive Spending Review.

Department of
Enterprise, Trade and Investment
www.detini.gov.uk

are increasing levels of R&D and innovation by the smaller Invest NI clients. Moreover, the move to a single HQ building has enabled the organisation to become more efficient and staffing numbers have been reduced by 20% since 2002. Government is satisfied that Invest NI has delivered much in relation to its core objectives.

That said, Invest NI continues to operate in a challenging and rapidly evolving economic environment. Invest NI's activities are being reviewed alongside those of others in the Comprehensive Spending Review process and this will inform public expenditure allocations going forward. Government is also currently addressing the transfer of certain local economic development functions from Invest NI to the new local authorities which will be established under the Review of Public Administration.

Recommendation 5

That investment in vocational training, skills and R&D activity in universities should be increased, an effective strategy developed to enhance knowledge transfer from applied R&D activity in commercially viable products, and that FE college curricula are better integrated with the needs of business and focused on areas where skills shortages are hampering future economic growth. The aim should be to create an enterprise culture in schools including the primary sector.

It is vitally important that there is enhanced knowledge transfer from applied R&D; that FE colleges are better integrated with the needs of businesses; and that there is a focus on key areas with skills shortages. Government also agrees that an enterprise culture must be created throughout the education system. Much has already been achieved in these areas. For example, through the Higher Education Innovation Fund (HEIF) and the Knowledge Transfer Partnerships (KTP) programme, knowledge is being transferred much more efficiently from Higher Education establishments to businesses. Government is also developing a Higher and Further Education Collaboration Fund to identify and meet the knowledge transfer needs of businesses. On skills shortages, the Skills Strategy and FE Means Business programme are being implemented; and, through advisory bodies such as DEL's Skills Experts Group, the regional Workforce Development Forums, and

Department of
Enterprise, Trade and Investment
www.detini.gov.uk

Recommendation 6

That a "Knowledge Bank" for business should be established modelled on the National Assembly for Wales strategy document "Wales: A Vibrant Economy"

We are aware of the "Knowledge Bank" concept and have also noted the further recommendation in the Sub-Group's second report. Officials have been in contact with colleagues in the Wales Office and this recommendation will be addressed more fully in a further response. However, it would appear that the services and assistance offered by Invest NI through its Client Team approach are similar to those available from the "Knowledge Bank". Government will nonetheless review the concept further to ensure that our approach in this important area is as effective as possible.

Recommendation 7

That a dedicated post should be created in the Department of Education for a person to take overall responsibility for improvement in science education.

Currently, science is well supported through the Education and Library Boards' Curriculum Advisory and Support Services and the officers of the Council for Curriculum, Examinations and Assessment. The creation of the Education and Skills Authority (ESA) will give DE an opportunity to consider the best arrangements for the future both for ESA's support for schools in the delivery of the science curriculum and for the Department's strategic role.

Recommendation 8

That any savings that may be made from government efficiencies should be retained and used in Northern Ireland.

Following the successful delivery of the Gershon efficiency plan in the 2004 Spending Review, Government has initiated a further efficiency drive within the ongoing Comprehensive Spending Review. As with Gershon, all efficiency savings will be retained within the Northern Ireland Block for allocation to front line service delivery. The efficiency agenda does not take resources away from Northern Ireland.

Department of
Enterprise, Trade
and Investment
www.detini.gov.uk

Recommendation 9

That PfG recommend the centralisation of government responsibility for economic matters within a single department or agency. That all government departments work to agree a common strategy and vision in support of promoting economic growth and social partnership that is accountable to a restored Executive

The Economic Vision for Northern Ireland sets the direction for economic policy over the next 10 years. It was developed by Government, involving all Departments, and its partners in business, trades unions, local political parties, academia and the voluntary sector. Government remains convinced that a co-ordinated approach is essential to achieving the goals set out in the Economic Vision and in the forthcoming Regional Economic Strategy. As a matter of good practice, Departments and Ministers consult and co-operate on the development and delivery of economic policies and programmes.

In terms of the Committee's recommendation for a single economic Department or Agency, it is agreed that this would be considered as part of any future restructuring of Government Departments.

Recommendation 10

That there should be a discussion with Ministers on alternative uses for the £30m set aside for an energy subsidy.

Government has decided to withdraw its State aid notification of the energy subsidy proposal. Although the European Commission had not taken a decision on the proposal, it was becoming clear that the proposal could not be targeted specifically at the business community, which was the original intention and that further delays were inevitable. As part of the Comprehensive Spending Review, DETI and DFP have been asked to consider alternative economic initiatives, which might provide more assured benefit to the business community from the remaining funds identified for the energy subsidy proposal. It should also be noted that the current CBO allocation is £20.7 million (£30 million was the estimated cost for the first two years only). Government will, of course, consider the Preparation for Government

Department of
Enterprise, Trade and Investment
www.detini.gov.uk

Committee's recommendation in ongoing budget management and in the CSR context.

Recommendation 11

That detailed analysis is undertaken to identify economic opportunities through establishing effective clustering and collaboration with RoI on infrastructure development, R&D and skills training along designated economic corridors.

This essence of this recommendation is already under active consideration by Government and by EDF's Vision Sub-groups. Furthermore, at the request of the British Irish Inter Governmental Conference (BIIGC), work to scope the extent for further practical co-operation on the development of all-island economic co-operation has been undertaken. A comprehensive study has identified a number of areas, under the themes identified by the Preparation for Government report, where future co-operation would deliver mutual benefits and how such co-operation might best be taken forward. The report was published on 26 October.

In relation to economic corridors, the North West Gateway Initiative is designed to provide a comprehensive framework within which further planning and collaborative action can be co-ordinated on a North/South basis. The key elements include the creation of a non statutory development framework; upgrading of the road network; completion of the cross border technology park; telecommunications links; measures to address employment, skills, economic development, further education issues and additional co-operation on health.

A parallel study is also underway on infrastructure, to build on existing collaboration in the areas of energy, waste management, transport and spatial planning.

Department of
Enterprise, Trade and Investment
www.detini.gov.uk

Recommendation 12

That the planning process is reviewed and adequately resourced and effectively managed to reduce delays and to provide an enabling culture and an appropriate balance between the needs of the economy and the requirements for consultation. That the planning process is streamlined by setting end dates for consultation and focusing priority on approving area plans.

Government acknowledges that there are general concerns about the time it takes to process some planning applications in Northern Ireland. The reasons for this are two-fold:

1. a rapid rise in the number of planning applications received in the last 3 years; and
2. increasing public interest in planning issues.

The first point is illustrated by the fact that in 2002/03 there were some 27,000 applications, rising to around 35,000 by 2004/05.

The second point is illustrated by the fact that over 55,000 objections have been received to applications in the last 2 years and, on a broader front, over 10,000 representations have been received on the three Area Plans recently published.

Planning Service staffing has also increased in the past 3 years from 616 posts to a current level of 864 posts, in response to backlog and the increasing workload. While Planning Service has a responsibility to manage the end-to-end planning process, it does not have total control of the process. Applicants, agents, consultees, including District Councils all have important contributions to make to an efficient planning process.

Planning Service is committed to making improvements where possible and, for the last 3 years, has been engaged in a very ambitious reform and modernisation programme. This is looking at all aspects of the system and involves legislative, information and communication technology, administrative and process changes, as well as preparations for the Review of Public Administration. Planning Service has

Department of
Enterprise, Trade
and Investment
www.detini.gov.uk

also created a new Strategic Projects and Design Division to handle economically significant applications. Taken together, these changes will bring real improvements in services and seek to address the concerns of the Sub-group.

The consultation process for planning applications operates with end dates and these form part of the normal procedures. In terms of Area Plans, Planning Service has an ambitious programme to provide complete and up to date development plan coverage for Northern Ireland and has made considerable progress in implementing this challenging programme. Within the past three years Planning Service has published three adopted plans and four draft plans, including the Draft Belfast Metropolitan Plan 2015. Collectively, this covers 18 of the 26 Council areas in Northern Ireland. Draft plans for a further 6 Council areas are under preparation and the remaining two Council areas are already covered by up to date adopted area plans.

For major electricity projects requiring consent from DETI, primary legislation has been brought forward to streamline the consents process which will allow DETI to grant not only the electricity consent but also the deemed planning permission.

Recommendation 13

That an implementation plan is developed and agreed across government departments and agencies that coordinates the delivery of various economic strategies and monitors performance against rigorous completion targets.

As indicated in the response to recommendation 9, the Economic Vision for Northern Ireland set the direction for economic policy over the next 10 years and was developed by Government in consultation with its social partners. Implementation actions in support of the Vision are monitored by the Economic Development Forum and the forthcoming Regional Economic Strategy will underpin the Vision. The RES will highlight where new actions need to be woven together with existing measures into a comprehensive, coherent and dynamic strategy for sustainable economic

Department of
Enterprise, Trade
and Investment
www.detini.gov.uk

growth, rising employment, better opportunities for all our people and greater wealth throughout Northern Ireland.

In terms of monitoring, it was agreed at the Economic Development Forum meeting in September 2006 that DFP, which is the lead department on the Regional Economic Strategy, will meet with the relevant EDF Sub-group(s) to establish ambitious targets for the NI economy. These targets will be reviewed by departments and EDF on an ongoing basis.

Recommendation 14

That an urgent review should be undertaken of the most appropriate and effective structure for delivering urban and rural regeneration plans.

Under the Review of Public Administration, the delivery of Urban Regeneration will transfer to local government in 2009. The Department for Social Development will, in the meantime, work with the Department of Environment to devise the most appropriate framework for guidance and oversight of local regeneration plans.

Recommendation 15

That serious action is taken to eradicate organised crime and criminality, particularly where it impacts on business and acts as a serious impediment to economic stability and growth.

The Organised Crime Task Force (OCTF) Annual Report and Threat Assessment 2006, published earlier this year, provides information about the extent of organised crime and the plans to tackle it. This is a key priority for Government, not only in Northern Ireland but in many other parts of the world. Among the actions being taken forward include: an extension of the membership of the OCTF to include the business community; raising awareness of the danger of organised crime; measuring its impact; putting in place a framework for identifying; prioritising and managing work against criminal gangs; strengthening licensing regimes and regulatory frameworks to prevent money laundering; enhancing asset recovery from criminals; reducing the impact of extortion and co-operating on cross border crime.

Department of
Enterprise, Trade
and Investment
www.detini.gov.uk

In addition, the Northern Ireland Affairs Committee recent report on organised crime set out 59 specific recommendations for tackling this issue in Northern Ireland. These will form a key part of Government's continued drive to address organised crime

Recommendation 16

The sub-group noted that from the current evidence it was clear that a low rate of corporation tax was a major driver in RoI economic success through promoting inward investment and that there have been problems in practice with the use of tax credits in Northern Ireland. The sub-group agrees that it would be appropriate to reflect on the outcome of the ERINI research detailed below and recommends that:

- **The Economic Research Institute of Northern Ireland's (ERINI) study on the impact of FDI should be copied to PfG and the economic sub-group to inform deliberations on fiscal options necessary to promote FDI and indigenous business;**

- **PfG request that DETI commissions an independent study into the relative economic benefits and comparative costs of a range of fiscal measures including:**

- **Reform of corporation tax to create a competitive headline rate;**

- **Increased R&D tax credits based on the work of Professor Harris;**

- **Improved grant aid including a substantial increase in the business investment budget and the possible reintroduction of the Chancellor's initiative on capital grants;**

- **Reformed fuel-duty levels to reduce the transport costs of business and undermine the smuggling of fuel that promotes crime and ultimately reduces tax revenue; and**
- **The capping of industrial rates and the introduction of a small business rate relief scheme.**

- **The study should examine the relative benefits and costs of each individual option and identify the combination that maximises FDI and indigenous business growth;**

The study, as a matter of urgency, should address the following questions:

Department of
Enterprise, Trade
and Investment
www.detini.gov.uk

- **Any costs in terms of revenue foregone?;**
- **Longer term impact on tax revenues as investment rises?**
- **How far is investment in established firms sensitive to rates of post-tax profitability?**
- **How far is the level of FDI determined by rates of business taxation and how far by other factors (such as availability of skilled labour, the science base, English language availability and extent of business regulation)?**

Government is aware of the ongoing debate on corporation tax and other fiscal incentives and has already stated that it will give full and detailed consideration to the proposals of the Assembly, including its second and third reports and the forthcoming ERINI research on fiscal incentives. As the Preparation for Government Committee is aware, the request for DETI to commission an independent study into a range of fiscal measures cannot be progressed. The Secretary of State has already indicated that this lies outside of the department's remit as it relates to an excepted matter.

Recommendation 17

PfG should set new terms of reference for the economic sub-group to:

- **Consider the results of the ERINI research and the commissioned DETI study into the fiscal options to prepare a costed case for consideration by a restored Executive and the Treasury;**
- **Consider and report on measures required to develop an integrated skills and education strategy capable of meeting the current and future needs of the economy and based on best practice elsewhere; and**
- **Undertake further work on how an economic package/peace dividend could contribute to economic regeneration**

Government welcomes the Economy Sub-group's extended Terms of Reference. It has noted the recent publication of the Sub-group's second report and will be considering the further recommendations, and additional suggestions contained in the Sub-group's third report, over the coming weeks.

Department of
Enterprise, Trade and Investment
www.detini.gov.uk

Recommendation 18

If an extended mandate for the sub-group is agreed by PfG, the sub-group recommends that approval should be given to temporarily contract an economist(s) as a special advisor to provide expert insight and advice on the sub-group's work and to assist in the preparation of a further report to PfG.

Government understands that economic advisors have been appointed to assist with the ongoing work of the Sub-Group.

Recommendation 19

The sub-group welcome recent efforts by the Economic Development Forum (EDF) to consult with local political parties and recommends that this political interaction should continue and be expanded to include a wider spectrum of interested organisations with a stake in the future of the Northern Ireland Economy.

Government and Economic Development Forum (EDF) members agree that local political parties are central to the debate on matters relating to the development and future competitiveness of the NI economy. It was for this reason that EDF expanded its membership in February 2005 and agreed that the local political parties should be invited to participate in the Forum: the political parties have responded positively by attending alternate meetings of the EDF. As the work of the Sub-group demonstrates, local politicians have a key leadership role. Other additions to EDF include the Federation of Small Business and an expansion in the representation from the Higher Education sector.

Recommendation 20

The sub-group recommends that the unacceptable rate of economic inactivity could be targeted by increased return to work credits through DEL, informed by research to assess the level of credit required to take people out of benefits. This would require a reintroduction of the Chancellor's Initiative Skills Fund.

Both the Economic Vision and the Regional Economic Strategy highlight the need to tackle the high levels of economic inactivity. The Department for Employment and Learning (DEL) has lead responsibility for getting people into work and the Pathways

Department of
Enterprise, Trade
and Investment
www.detini.gov.uk

programme is a key policy instrument to achieve this, which Government is committed to extend to all in Northern Ireland within two years, in line with available resources. DEL accepts the principle of work credits and indeed they are currently available in the Pathways programme. Return to Work Credit is proving popular with incapacity benefit claimants who are returning to work. However, proper evaluation is required to determine if it is the key factor that determines someone's decision to take that step. Only about half of those who return to work after a Pathways to Work intervention receive Return to Work Credit. This would suggest that there may be other influential factors. An interim evaluation will be conducted next Spring when there will be sufficient data to provide a robust analysis.

Recommendation 21

The sub-group took into consideration the evidence submitted by witnesses and recommends that an economic package should focus on the following 4 key areas:

- **Community regeneration (urban and rural)**
- **Infrastructure**
- **Education and skills; and**
- **A cocktail of fiscal incentives capable of attracting FDI and encouraging the growth of high value added indigenous companies.**

Government notes the views of the sub-group regarding the components of an economic package. It also notes that the second report addresses these issues in greater detail and are currently giving that report and its further recommendations full and detailed consideration.

Memo to the Preparation for Government Committee regarding the future remit of the sub-group

From **Jim Wells**
Chairperson
Sub-group on the Economic Challenges facing Northern Ireland

Date **9 November 2006**

To **Nuala Dunwoody**
Principal Clerk
Committee on the Preparation for Government

Sub-group on the Economic Challenges facing Northern Ireland – Future Remit

At today's meeting of the sub-group it was agreed that I should write to the Preparation for Government Committee about the role that the sub-group might play in the ongoing discussions with HM Treasury on the proposed economic package.

The sub-group agreed unanimously that given its key role in developing a proposed economic package it could continue to play an active and useful role. In particular the sub-group might be asked by PfG and the political parties to develop an alternative proposal to put to the Chancellor in response to the economic package outlined at the meeting on 1 November 2006. If this were accepted it would be important that PfG should press the Secretary of State to allow departmental officials to provide briefing material and be available to attend meetings of the sub-group.

The sub-group recognise that maintaining consensus on economic matters will strengthen any negotiating leverage with the Chancellor. In this regard if PfG are content with the above proposal it may wish to consider whether it would be appropriate to recommend that the Parties should involve members in the sub-group who will play a key role in future negotiations on the economic package.

The sub-group would welcome PfG views on this proposal and stands ready to do further work if required. The sub-group appreciate that this might be a role for the Programme for Government Committee but in any event the sub-group is available to provide support whatever decision is taken.

On a practical issue, the sub-group approved payment to its economic advisers at today's meeting but recognise that the advisers would need to continue to provide advice if PfG decide to extend the sub-group's role as proposed. In such circumstances the sub-group requests that PfG approve an extension to the contract arrangements with its economic advisers. The sub-group will advise PfG about the details of the work and costs involved and seek approval as appropriate.

Jim Wells

cc Sub-group Members
Sub-group chairpersons
Mrs Pritchard

Correspondence with the Department for Regional Development

Sub-group On The Economic Challenges Facing Northern Ireland

Room 414
Parliament Buildings
BELFAST
BT4 3XX

Date: 9 November 2006

David Sterling
Deputy Secretary
Department for Regional Development
Room 701, Clarence Court
10 – 18 Adelaide St
Belfast BT2 GB

Dear Mr Sterling,

Thank you for your recent submission in relation to the evidence given to the sub-group by the Consumer Council on 26 October 2006. Members considered your submission at a meeting on 9 November and agreed to seek further clarification in relation to paragraph 13. In this paragraph, you make reference to the fact that borrowing power under the Reinvestment and Reform Initiative (RRI) is conditional upon the introduction of water charging. The sub-group was somewhat surprised by this, as they thought that borrowing under the RRI was related to potential increases in the domestic rates.

The sub-group would be grateful if you could provide further explanation, including whether borrowing was originally conditional on domestic rates; when borrowing under the RRI became conditional on water reform and the policy considerations behind this change.

The sub-group requires this information by close of play tomorrow (Friday 10 November 2006), as it is to meet on Monday afternoon to agree its third report to the Committee on the Preparation for Government. This should be sent to me at the above address, or e-mailed to Alan.Patterson@niassembly.gov.uk Please do let me know immediately if this information cannot be provided.

Yours sincerely

Alan Patterson
Principal Clerk

Response from the Department for Regional Development

DRD
Department for Regional Development

Alan Patterson
Principal Clerk
Sub-Group on the Economic Challenges facing Northern Ireland
Room 414
Parliament Buildings
BELFAST
BT4 3XX

Room 701
Clarence Court
10-18 Adelaide Street
BELFAST
BT2 8GB
Telephone: (028) 9054 1180
Facsimile: (028) 90 54 1120
Email: david.sterling@drdni.gov.uk

Your reference:
Our reference: DRDDS 218/06
13 November 2006

Dear Alan

I refer to your letter of 9 November requesting on behalf of the Sub Group further information in relation to the borrowing power under the Reinvestment and Reform Initiative. The following reply has been agreed with the Department of Finance & Personnel.

The RRI borrowing power has never been conditional on "domestic rates", however access to borrowing, on an annual basis, is conditional upon closing the total revenue gap between NI and England. In this context, the relevant revenues are Council Tax and the National Non Domestic Rate in England, and all (i.e. domestic and non-domestic) Regional and District Rates in Northern Ireland.

As regards the link between water and borrowing, in the course of the 2004 Spending Review, the Chief Secretary indicated that he reserved the right to review the ongoing borrowing facility, if the date for the introduction of water charges slipped beyond April 2007. This point has never been tested further as it is the Government's firm intention that domestic water and sewerage charges should be introduced from April 2007.

I hope that the Sub-Group find the further information above helpful.

Yours sincerely

(Signed)

David Sterling

DAVID STERLING

13/11/06 11:27 J:\INFORMATION & COMMUNICATION\Government Liaison\Permanent Secretary Queries\Senior Finance Director\Nov 06\13.11.06 DRDDS 218 A Patterson RRI borrowing power.doc
CS

Appendix 2

Official Report of Proceedings relating to the Report

Wednesday 26 October 2006

Members:
The Chairman, Mr David McClarty
Mr Leslie Cree
Mr John Dallat
Dr Alasdair McDonnell
Mr Mitchel McLaughlin
Mr David McNarry
Mr Sean Neeson
Mr Robin Newton
Mr Edwin Poots
Ms Kathy Stanton

Witnesses:

Mr Steve Costello Mrs Eleanor Gill	The Consumer Council

The subgroup met at 10.12 am.

(The Chairman (Mr McClarty) in the Chair.)

1. **The Chairman (Mr McClarty)**: The Consumer Council has been allocated one hour to give a 15-minute presentation to the Subgroup on the Economic Challenges facing Northern Ireland, which will be followed by questions. The Consumer Council has already provided the subgroup with a written submission, and it will also table a bullet-point presentation, together with a letter of support signed by business, community, voluntary and trade union partners.

2. I ask members to keep their questions to the witnesses brief. Members should focus on the relevance of the Consumer Council's proposals for an economic package. I also remind members of the sub judice requirement. Members should avoid raising any matters that are subject to the ongoing judicial review, including the process that the Department for Regional Development (DRD) used in the preparation of the draft Water and Sewerage Services (Northern Ireland) Order 2006, and the Department's consultation procedures.

3. Otherwise, members and the witnesses are at liberty to discuss the general rationale for water-reform costs and its potential inclusion in an economic package.

4. **Mr Neeson**: I know that Hansard will record this part of the meeting. However, will Hansard record our consideration of next week's meeting with the Chancellor?

5. **The Committee Clerk**: No. After the witnesses leave, we will immediately go into closed session, of which there will be no Hansard record.

6. **Mr McNarry**: Why is that?

7. **The Committee Clerk**: We need to consider any possible recommendations that arise from the evidence and to prepare for the meeting with the Chancellor on 1 November. It is normal practice that such issues be considered in private session.

8. **Mr McNarry**: The subgroup has not been asked to meet the Chancellor.

9. **The Chairman (Mr McClarty)**: The subgroup was not invited to meet the Chancellor. The invitation was sent to the parties, and they will decide who will represent them at the meeting.

10. **Mr McNarry**: Our later discussion is relevant to a meeting that we will not be attending, so why is it not being recorded? Our opinions should be recorded, as they are highly relevant.

10.15 am

11. **The Committee Clerk**: It is a matter for the subgroup to decide whether it wants parts of the meeting in closed or open session.

12. **Mr McNarry**: We should not debate this matter in front of our guests. Perhaps we should discuss it later.

13. **The Chairman (Mr McClarty)**: OK, we will do that.

14. Good morning to our witnesses. You are both very welcome. Neither of you needs any

introduction to members, but for the record, Steve Costello is chairman of the Consumer Council, and Eleanor Gill is its chief executive.

15. **Mr Steve Costello (The Consumer Council)**: Thank you for the invitation to give evidence on this important issue. I will say a few words about principles and then hand over to Eleanor, who will make a more substantial presentation.

16. The first fundamental principle is that high-quality public services, including water and sewerage, must be paid for. However, our caveat is that the payment must be fair, affordable and sustainable: fair, in that it must represent true value for money; affordable, in that it must help the disadvantaged; and sustainable, in that water is a precious long-term resource, and the business model must reflect that.

17. We are prepared to pay more for public services if necessary, but our basic principle is that we must get this right as opposed to simply getting it done. This is a £3 billion capital investment project based over 20 years. We estimate that the average household will pay about £10,000 for water and sewerage services in that time.

18. We are here to question the scrutiny that has gone into the draft Water and Sewerage Services (Northern Ireland) Order 2006. Legislation has been laid before Parliament, but it is currently deferred; there is no licence — that is work in progress; there is no letter of governance; and, above all, the strategic business plan has not been signed off — it is now on version three as there have been difficulties with it. That is the context, the scrutiny and the building blocks that we are being asked to sign up to, and it cannot be right that the legislation should be dealt with by Order in Council.

19. If the Assembly is restored, the funding gap will become the Assembly's problem, as will debt and public confidence. Some issues of accountability will not make sense to the public, so there will be a crisis of confidence. There is cross-sectoral support for our views at social and business level, and the subgroup will have received a copy of a letter to that effect. There is also the need to get it right. The risk and the cost of getting it wrong are greater than the initial cost of not getting it right.

20. Over the past few weeks, I have written letters to Minister David Cairns containing proposals on ways of ensuring that consumers are charged a fair price. The Minister's response was that he could not commit the Assembly to such a proposal. He said that he could not commit to certain elements of our policy, though he is going to commit a new Executive to the Water and Sewerage Services (Northern Ireland) Order 2006. That does not make sense. The cost of getting this wrong is that customers will be charged £62·7 million in year one.

21. Northern Ireland will have to repay £58 million to the Treasury in year one as the return on assets. That is a difference of some £4 million to £5 million.

22. That is a simplistic comparison, but looking at the economy in the long term, we know that it will take the new Northern Ireland Water Ltd up to 2015 to get the efficiencies into place. Therefore, over an eight-year period, Northern Ireland will pay £600 million back to Treasury. Some £70 million of that will be above the market rate, because Northern Ireland has been asked to repay the money to the Treasury at a rate of 5·8%. The Office of Water Services (OFWAT) cites a figure of 5·1%, which the private companies in England repaid as a return on the asset base. Therefore £70 million out of the £600 million will be repaid at a rate above the market rate, and that is crazy.

23. There will be substantial debt occurring from moneys given by the Department for Regional Development (DRD), and it will be repaid as a long-term debt. That money will also be repaid at 5·8%, which is above the commercial rates, and £60 million of that will be uncompetitive. Therefore out of the £1 billion that we will be paying back as either a return on assets to the Treasury or as a repayment of a debt to the Government here, we will be paying £120 million in interest.

24. For the sake of the progress of small private-sector businesses in Northern Ireland, it is imperative that water charges are kept as low as possible. The Consumer Council is

concerned that that is achieved, because water rates will be a significant business cost. Everyone knows what expenses businesses have in relation to transport, power, electricity and insurance. Small businesses are at the tipping edge, and this issue must be settled properly for their sake.

25. The Consumer Council is in no doubt that water charges will be the biggest rising cost in the household budget between 2010 and 2015. It is impossible to put a figure on what it will be, but we estimate that it will be close to 10% of a household budget. That will bring with it a basic lack of confidence on the part of customers, who will want to know why a Government-owned business is causing more damage to their pockets than anything else. People will have less money to spend, so they will put demands on the Assembly to get this right.

26. **Mrs Eleanor Gill (The Consumer Council)**: I will detail some of the issues that the Consumer Council believes should be looked at, and I will follow that with details of what the Consumer Council believes are the ways ahead and on which we ask for your support and action. These are not only the thoughts of the Consumer Council, but of the business and social sectors, the Northern Ireland Local Government Association (NILGA) and other union interests with regard to the debate.

27. One cannot look at the draft Water and Sewerage Services (Northern Ireland) Order 2006 in isolation. It is part of a critical element of packages within water reform that must be investigated. That must begin with the financial agreement that was signed by the Treasury and the Secretary of State in 2005. The Consumer Council has not seen that agreement, and I do not know anyone who has seen it or understands what it is. However, we know that it is central to the decision-making and to the principles and policies that are pushing the draft Order, and the licence, etc, that go with it.

28. As members will know, the draft Order has been finalised and laid before Parliament, and the licence is still a work in progress. The Consumer Council is involved in the licence-development working group, and although we have managed to get ourselves to the table, we are ill-equipped to do anything. There are many solicitors and advisers for the Water Service — which will become a Government-owned company (Go-co) in 2007 — for DRD and for the regulator at the table. Our aim is to ensure that we understand the developments that are taking place and to make an input at the table. It is not a level playing field, and we are unclear as to what shape the consultation on, independent scrutiny of, and review of the licence will take. The outcome on the licence is critical because it will transfer the assets and the responsibility for the delivery of the entire financial model over to the Go-co.

29. Since June, three iterations of the strategic business plan have been produced. Not only that, but there are also two versions of two scenarios being worked on. DRD and the Water Service are working closely together on those; the Consumer Council is not involved at this stage.

30. There is currently no clarity even on how the business plan will be consulted on or scrutinised. Ultimately, it may be signed off among the Department for Regional Development, the Water Service and the regulator with no opportunity for scrutiny. The Consumer Council has commissioned independent research into the second iteration of the business plan, expertly carried out by a London economist. During my presentation, I will refer to comments in that report, which we received in September 2006.

31. Furthermore, the Consumer Council has been advised that no one will see the governance letter, which will be transferred from DRD, as the shareholder, to the board of the new Northern Ireland Water Ltd Go-co. The contents will not be shared but will be passed over with the transfer of assets.

32. The Consumer Council expected that the licence development group would discuss issues such as who would get the proceeds from the disposal of land. The Consumer Council has written to the Minister on many occasions asking him to clarify that. We also wrote to the Secretary of State but have received no

clarification. In fact, last month, Minister Cairns declined our request for public consultation.

33. We must not simply allow a draft Order to be passed now and consider the detail of the other elements later. They are all linked and must be viewed and scrutinised as an entire package so that customers, businesses and the Northern Ireland Assembly know what they are being expected to buy before signing up to it. There is a blank cheque, and this package contains many risks unless it is scrutinised.

34. We hope and pray that the further work being done will address some of the issues that the Consumer Council has raised. However, five months before the crucial establishment of a Go-co and the introduction of a water charge is too little time to allow for scrutiny and review in order to ensure that the package is right. I will develop that point later.

35. Based on our independent, expert research, we believe that the legislation is incredibly short term in nature. There is much security and certainty until 2010, which is a crucial date because consumers and businesses will then be expected to take on the entire costs of the Go-co. Therefore, until 2010 we know what the price will be and that the Government will centrally fund the affordability tariff. However, in 2010 all those certainties disappear. The draft Order is fundamentally flawed in many respects, the main four being price, affordability, land and protection. I will expand on those areas later in my presentation.

36. When considering the draft Order, the Consumer Council drew on its experience in energy, transport and food. The draft legislation, as it stands, will facilitate the development of an unfettered monopoly. It will allow the shareholder to retain significant areas of responsibility, such as giving guidance to the Department that shall be taken into account by the regulator when setting a price; holding on to the authorisation and disposal of land, and holding on to the principal responsibilities for sewerage and waste-water treatment until a later date to be agreed by the shareholder because, as has been put in writing, there are concerns about the infraction costs that may be landed upon Northern Ireland Water Ltd in the near future.

37. There is, therefore, a pathway development towards a privatised model. That may or may not be the right approach. However, without the information being in the public domain, who can judge whether that is the direction in which Northern Ireland wants to go? From our consumer research, every time that we have asked — and we have undertaken independent baseline research with a follow-up report and further research three years later specifically on water — that there is no thirst among consumers or social and other partners for a move to privatisation.

38. There is a fear that Northern Ireland will lose yet more of its family silver and that money will drain away from here and go elsewhere. That is a huge issue. The current legislation would create a monopoly, and we must not allow it to be passed. The draft Order must be deferred. That must be an issue for the Northern Ireland Assembly. If the Order is not deferred, it must be amended before it is passed. It is not a matter of passing the Order now and fixing it later — there are big issues involved. The Consumer Council believes that the Assembly should decide the best way forward, including how people in Northern Ireland should pay for public services, such as water and sewerage. There must be a proper, informed debate.

39. There will be a £3 billion investment over 20 years. About £1·4 billion of that is made up of the capital backlog. That is the cost of decades of under-investment.

10.30 am

40. Consumers should not be expected to pay for past under-investment. They are expected to fund 50% of the overall 20-year plan, and that would add over £80 to each bill. We know from the Water Service that, despite the current level of investment, Northern Ireland Water Ltd will still be some 10 to 15 years behind the English and Welsh infrastructural set-up. Therefore we do not have a level playing field.

41. The Government argue that knocking down the value of the assets of Northern Ireland

Water Ltd from £5·6 billion to £1 billion is the equivalent of them giving us back £4·6 billion as part of the peace dividend. The Consumer Council believes that consumers, businesses and taxpayers have paid for those assets over the years. We rightfully own those assets, and we should not have to pick up that cost.

42. The cost of under-investment is one matter, but the extent of infraction costs poses a greater risk. Everyone predicts that a bill for infraction is on its way. What are the risks that are connected with that? Those risks are not built into the price, and therefore we could be subject to even greater costs due to lack of investment and rising bills. The Assembly should include that point in negotiations with the Treasury over the investment package and argue that it should pick up the capital backlog cost. However, I will return to that point.

43. Given that the Go-co will be the accepted business model and will substantially dictate performance, quality standards and price over the next 20 years, its stability causes the Consumer Council and others concern. We have commissioned independent research, the results of which are in a report that I provided to the Committee on the Preparation for Government. That report also contains privileged figures from our independent research. That research reveals that the version of the strategic business plan that was current in September does not set out a sustainable future for Northern Ireland Water Ltd. It also states that there is insufficient evidence to assuage the idea that, in the medium term, the Go-co is sustainable only with significant price increases. The research elaborates on what those increases might be. We must then ask who carries the risk in the development of the legislation and of the business plan and licence.

44. We know that £58 million will have to be paid next year from the Go-co to the Treasury. That money will not remain in Northern Ireland to fund other services. We estimate that by 2015 that dividend will be some £600 million. That figure might be slightly inaccurate; we have to guess a lot because we do not receive all the information for which we ask. However, we do not think that we are too far out.

45. **Dr McDonnell**: Is that per year?

46. **Mrs Gill**: No; that figure covers the period from now until 2015.

47. As Mr Costello said, £62 million will be collected from customers next year, and £58 million of that will be sent away. Much of that is based on borrowing to deal with the past capital backlog of investment.

48. The Go-co model is premised on the fact that the water company must be sufficiently efficient to produce dividends. If it is not efficient, that dividend must be met from within the departmental expenditure limit for the Department for Regional Development. The cost of that will be reduced public transport, fewer roads or reductions elsewhere. The Financial and Strategic Review of Water Service, which was undertaken by the UBS Investment Bank and others and based on the Water Service's data for November 2005, stated that, in order to produce the required dividend, the Northern Ireland water company would have to produce 40% efficiencies in its operating and capital costs.

49. In February or March of this year, the Department for Regional Development advised the Consumer Council that it would exert upon Water Service efficiency targets of 35% for operating costs and 27% for capital costs. In the past month the Department has, in writing, rolled back from that position, saying that that was merely a starting point to focus the company on what it needs to do over the next few years. Our point is that any shortfall must be met. Who will pick up the bill? As the Go-co model stands, reduced public services and higher percentage water bills will be necessary to compensate for that shortfall. Alternatively, given that the shareholder has sole responsibility for authorising land disposal, there may be a temptation to sell land to make up for some of the shortfall. Again, we may find ourselves selling off the family jewels to others.

50. The current model assumes that the level of bad debt will be 5%. In January 2005, the Consumer Council met the then Minister, John Spellar, and told him that, based on evidence from elsewhere, it believed that the figure of 5% was a severe underestimation and that the

level of bad debt could be anything from 10% to 15%. The council provided him with empirical evidence of that assertion.

51. Since then, the situation in England and Wales has worsened. Last year, there was a 43% increase in the number of people against whom legal action was taken for unpaid bills. Our independently commissioned report shows that the success or failure of the Go-co will very much be determined by the estimation of the level of bad debt within the company.

52. I return to the Treasury deal and the strategic business plan. The rules of the game within the proposed financial model are such that all debt will automatically be passed through to customers' bills. We do not even know how much that debt might be. Everyone knows that the level at which the debt is currently set is too low.

53. I now turn to the £220 million worth of public-private partnership (PPP) contracts — the Alpha and Omega contracts. Another rule within the proposed financial model is that all present commitments within those PPP contracts will be passed straight to customers' bills. The Consumer Council has not seen those contracts, nor do I know of anyone who has. We do not know what commitments are contained within them; we only know that we will be committed to picking them up.

54. That raises an issue for us, and it also raises an issue for the Go-co. The new Go-co — which will be Government-owned, and, by 2010, paid for by every customer and business in Northern Ireland — will operate one of the most savage debt-recovery systems that I have ever read about, and yet the Consumer Council, which has primary legislative responsibility for examining the handling of customer complaints, billing and debt, has not been consulted. The system that the Go-co will put in place is known as a "smart debt" system, which tries to identify which consumers are most likely not to pay, based on their incomes and their higher balances. That system categorises some of those who are not able to pay as being at "rock bottom". People are mapped so that all those who are deemed "rock bottom" are marked in red on a map of Northern Ireland.

55. However, it does not stop there. The new system will chase consumers who are categorised as "rock bottom" twice as quickly as those who have the ability to pay or who pay by direct debit. From the information that the Water Service has provided to us, we know that reminders will be sent out to those consumers in half the time that they will be sent out to other consumers — 15 days compared to 28 days. They will have 28 days before recovery proceedings begin and 49 days before legal action begins, compared to 56 days and 83 days respectively for those who are less likely not to pay. That system savagely chases debt to secure an income stream for a Go-co, but we believe that that income stream is very unstable and that it hits at the most vulnerable and the least able to pay. The Consumer Council's question is: do we want such a system to provide our most scarce and valuable resource? The Consumer Council believes that the answer is no. It believes there must be full independent scrutiny of the Go-co strategic business plan; it should not simply be signed off in a hurry to get things done in time for April 2007. Time is just too pressing.

56. The council and its partners believe that it should be the Assembly's responsibility to secure the most sustainable business model, although we recognise that we have to pay more if we want the type of service that we desire. We must find a solution to that.

57. We are all very proud of the affordability tariff. Members may know that, in the end, the Consumer Council's model was adopted, as opposed to the model that proposed a 25% discount on the capital value of one's house. The affordability model is based on income and income-related ability to pay, and it is now being put forward as a potential solution to some of the anomalies in the rating system.

58. The affordability tariff will help more than 200,000 vulnerable households that are on certain passport benefits. Of course, there are many near-benefit households that need help, but the system is a good start towards trying to help. Importantly, we argued that it was the

responsibility of the Government, not of consumers, to pick up the cost of social protection of those in need.

59. The system in place at the moment will cost £30 million in 2007-08, and Government figures show that that will rise to around £50 million plus by 2010. There is no certainty in the legislation that the money will be found from central Government funding beyond 2010.

60. Our point to the potential Assembly-in-waiting is that there will be a £50 million funding gap, and that will rise. The legislation says that the affordability tariff "may" as opposed to "must" be paid, and, therefore, there is no provision for that funding to be made.

61. What is the answer? Do we reduce our public services by £50 million to pay for that gap? Do we increase the bills and make the customers pay, even though they cannot afford it any better — we calculate that that would mean another 10% on the bills — or do we remove the protection from the most vulnerable?

62. In England and Wales, one in four county court judgements is made against people who are being chased by their water companies, and there has been a 43% increase in legal action in the past year. This is a huge issue, which comes on top of fuel poverty. The result might mean that those people who are being chased may pay off their water bills but not turn on their heating, and that will have an underlying impact at a time when the Government are introducing an anti-poverty strategy. The Consumer Council feels that there must be a legislative imperative from the Government to fund the affordability tariff and not place that burden on other customers.

63. I turn to the question of land and who benefits: the land and assets owned by the Water Service are valued at around £5·6 billion. We do not know who will get the proceeds of the land and assets disposal, although we have asked continually. No paper exists to show who controls the assets, or what the rules are about a shareholder authorising the Water Service at any time to dispose of assets. We do not know whether they will stay in Northern Ireland to help.

64. Some £1 billion pounds was lost to customers through the privatisation of electricity. Are we prepared to repeat the mistakes of the past? We have many examples of where we have had to put good money in after bad in an unsustainable and unstable model, and the Water Service has told us in our independent review that that is unsustainable.

65. As to the transfer of ownership by the Go-co, we know that if the Assembly is not sitting, no public voice will be enshrined in legislation before that privatisation, or before any other type of model moves in or out of a Government-owned company, and the public will have no say on what happens to what they own and pay for.

66. When the Consumer Council looked at the recent sale of Thames Water, it found that it increased in profitability by £3·2 billion in six years, and it has just been sold to another private equity firm. There are many other examples, including Phoenix Natural Gas and the buyout by Terra Firma, or the Viridian deal with a Bahrain private equity company. Is that what we want?

67. The land-disposal proceeds must be kept in control for the people, and no ownership should transfer without the people's deciding that that is what they want. We are imploring the Assembly to take that matter forward.

68. Those are just some of the headline issues. We are happy to explore them further and to answer any questions that members may have.

69. I turn to the potential way ahead. The Consumer Council would prefer the legislation to be deferred to allow it to become a matter for the Assembly. The council feels that if there is no deferment, the Assembly, or the local parties, will need to secure draft Order amendments and commitments from HM Treasury. If the legislation is introduced as it stands, and without looking at the totality of the package, it will be fundamentally flawed and will cause huge problems that will haunt us for the next 20 years.

70. There will be no price protection after 2012. Under price protection, the capital backlog must be paid by HM Treasury, and there must also be price pegging until 2015. The

Consumer Council has calculated that if price pegging were negotiated, it would cost around £140 million to ensure that Northern Ireland was pegged to the England and Wales average for the next 10 years. We also need the dividend requirement of HM Treasury suspended, which is in the deal between the Secretary of State and HM Treasury, or suspended until the Go-co was efficient and able to produce the dividend itself.

71. We calculate that it is about £600 million. The cost of borrowing must be renegotiated because it is above the commercial rate: a further £62 million is needed. Affordability must be absolutely enshrined so that those who genuinely cannot afford to pay do not have to worry about how they will pick up the cost. That will mean another bill of £50 million a year — a figure that is rising.

10.45 am

72. The proceeds of land disposal must be kept in Northern Ireland; they must be reinvested into its services and must be aimed towards getting prices as low as possible. None of that is enshrined in legislation, licence or in the strategic business plan. Consultation ownership must change. Legislation on consumer protection must provide truly unfettered independent responsibility for the regulator and the consumer body. I have outlined some of the areas in which that is not the case at present.

73. Without a deferment, strong arguments in favour of amendments must be made to ensure that an Order in Council is not passed. If it were, it would be fatally flawed. The Consumer Council's preferred option is that all the parties in the subgroup consider a secure deferment for the time that is needed for the Assembly to correct the matter. The council wants that to be part of the financial-package negotiations that take place under the terms of the St Andrews Agreement.

74. The Consumer Council recognises that while time is taken to improve the situation, there will be gaps in public services. Last week, the Secretary of State told the House of Commons that there would be a gap of between £200 million and £300 million in investment in the water and sewerage system. The council calculates about £120 million. It has written to the permanent secretary to ask him to explain the discrepancy between what David Cairns told us the gap would be — £130 million — and the Secretary of State's estimate of at least £200 million, just five months before the establishment of water charges.

75. The Assembly must seek deferment of the Order in Council so that it can be amended, and must urge the Treasury to pick up the cost of the gap in services in the meantime, because the cost of getting it wrong is much greater. The Assembly must, as part of the financial package, seek commitment from the Treasury to pay for the capital backlog — which is about £1·4 billion — or pay a significant percentage if it. The Assembly must take the unique opportunity independently to scrutinise and review the reform of water services in their entirety, so as to decide how best to introduce payments for water and sewerage. That will include consideration of the financial model, as well as ownership issues, the business model, investments, costs, and so on. Those issues must be worked out. However, time must be taken to get them right.

76. We want the new Assembly to be certain of what it is committing to. Northern Ireland's consumers could face one of the fastest-rising costs of the total household bill. They are already affected by rates, energy costs and all kinds of other pressures. The Government are committing the new Assembly to what is potentially one of the biggest issues with regard to public, business and cross-sector confidence. The Consumer Council has presented a letter to the subgroup that states its belief that the plans are flawed and that they should not be taken forward in their present state.

77. In response to what the Secretary of State said last week, the council wants to assure the subgroup that it is not ducking the issue. It recognises that money is needed in the meantime to keep improving public services. Northern Ireland deserves that; it has been paying for those services for years. More money may need to be paid under a new Assembly. I guarantee that the Consumer Council will support any future Assembly in its need to

spend more in order to provide the public services that Northern Ireland deserves.

78. The council understands that hard decisions must be made. For example, it approved a 17% to 20% increase in gas prices because it believed that to be fair under the conditions at the time. The council does not shirk its responsibilities. It does not seek the cheapest option; rather it seeks the fairest, most reasonable and sustainable way of making progress. It seeks parties' support and, more importantly, their action to advance the issue in the Preparation for Government Committee and in the Programme for Government Committee, and to use that unique opportunity to secure a financial package from the Treasury that will allow the Assembly to get those matters right. Otherwise, they will haunt us for many years to come.

79. **The Chairman (Mr McClarty)**: Thank you, Eleanor and Steve. Before I allow members to ask questions, may I remind members and visitors alike to switch off their mobile phones completely, as they affect the recording system.

80. **Mr Neeson**: Thank you for your presentation. I have still in my possession a letter from John Spellar MP, written to me when Labour was in opposition, stating that in no way would he tolerate the privatisation of water services in Northern Ireland, even through the back door. Would you agree with me that what is proposed now is, in fact, water privatisation through the back door?

81. You ask us as elected Members of the Assembly to request that the Secretary of State postpone the proposed legislation at least until 24 November, when it is hoped that the Assembly will get up and running again, so that it can deal with the issue.

82. You do not need reminding that a precedent has been established. In 1982, when new consumer legislation was being introduced, I remember that we asked the then Secretary of State to postpone the legislation to allow the Assembly to deal with it. He did so, and that led to the formation of the Consumer Council.

83. **Mrs Gill**: We believe that the establishment and the gearing of this company will produce an attractive set of circumstances for future privatisation. I attended a conference in the Slieve Donard Hotel a few weeks ago at which the chief executive of Water Service in Northern Ireland gave a presentation. She was asked from the floor whether we were on the road to privatisation. I wrote her response down, almost verbatim. She said that that was a political matter, but what everyone was agreed on was that before they could think about that, they needed to secure a good revenue stream and get investment in place in order to allow that to happen.

84. The Department describes its proposed legislation as "flexible". We would call it ambiguous. If the Assembly is not in place there is nothing to stop the movement towards that. However, we believe that other pressures might come to bear. If this is an unstable model — and it looks as if in a few years that bills are going to rise; there is possibly no other way but to wrap this debt up and pass it on to customers — the next natural response may well be that this cannot be done in the public sector but must be done in the private sector. Then we are on the road to privatisation.

85. If we examine the business model now and get it right, we can decide what type of ownership we want. How do we guarantee that the wealth stays here while at the same time acknowledging that it has to be paid for and that we need to pay more, because improvements have to be made?

86. We want what you want. We want to ensure that this legislation does not arrive in the form of an Order in Council, not just because of the draft legislation in isolation, but because of the imperative to look at the other elements that make up the whole.

87. Finally, we are thankful for the precedent that set up the Consumer Council.

88. **Ms Stanton**: Thank you for a great presentation. You told us that the number of people threatened with legal action for non-payment of water bills in England and Wales rose by 43% in one year. Do you have an estimate of the cost of that action to Government?

89. **Mrs Gill**: The figures are contained in the Office of Water Services (OFWAT) report. I am sorry that I do not have them with me, but I will forward them to members.

90. **Ms Stanton**: It would be helpful to have them.

91. **Mr Poots**: Thank you for your presentation. It was a devastating report on the current proposals for water charges and the establishment of the Go-co. The unsatisfactory nature of what is proposed is something that we could get cross-party agreement on, because it would have a devastating impact on Northern Ireland. As a consequence of that, there will be general agreement that we all want to do something about it.

92. When we speak to the Chancellor, we can win the battle over retaining the land values in the event of any sales of assets. However, we need to think about what we might propose as an alternative. Have you given any thought to any other ways in which water reform might be achieved that would avoid European Union infraction proceedings and address the underlying investment issues in a way that will not be detrimental to ratepayers?

93. **Mrs Gill**: What we have tried to provide today is two steps towards answering your question.

94. Our first step will be to ensure that we negotiate a deferment, and then we will respectfully work with the Assembly and the parties to review the position and to look at what is the best business model to put forward. The Consumer Council believes that as well as securing the land as part of the Chancellor's package, Northern Ireland should also get a commitment that we will be given the full capital backlog, or at least a significant part of it. That would result in an immediate reduction in charges and make the price fairer and more palatable for everybody. We must ensure that people see the charges as being fair, and not too expensive or unaffordable.

95. The Consumer Council will suggest that everyone has a voice on this issue, and the letter from our partners adds an important consensual voice. I suggest that the Assembly initiates studies and an independent scrutiny of how things stand so that we can establish what the preferred model would be. If, for instance, the dividend were suspended, we would get a better impression of whether a Go-co was really necessary.

96. Just as people must breathe, a Go-co must produce a dividend. If a Go-co was not, therefore, necessary, we could learn — as we did from previous evidence — from the Welsh model, Welsh Water, which is a not-for-profit model, or the Scottish model, Scottish Water, which is in public ownership.

97. There are many ways in which we can incentivise everybody to make this a more efficient way of going forward. The Consumer Council has already done a lot of work on this issue, and in 2003 and 2004 we asked for the business rationale on why the Go-co model was chosen. We were frustrated not to receive that information. We need to respectfully tell the Chancellor that we are not trying to get out of paying for water and sewerage services, but we want commitments and time to work with the Assembly on introducing the best way forward.

98. Various elements of the draft Order must be examined. For instance, is it correct that a household's water charges should be based on the capital value of the property? Should it be incorporated into the rates — as it has been already? Should it be linked to income tax? Or, should meters be installed to ensure that, in future, people are more efficient with water? There is an array of questions to be asked, but the decisions made now may prevent the opportunity for those questions to be asked in the future.

99. There is a viable argument for the economic subgroup's asking those questions forcefully, and the Consumer Council will be behind you and agree that the questions have to be asked. Ultimately, some difficult decisions must be made. However, if the discussions are carried out in a democratic manner, everyone will be heard, and we will support the decision reached and move on. At this stage, we do not

believe that we have been granted that opportunity.

100. With regard to the retaining of the land value, I was pleased to hear that the land disposals would stay in Northern Ireland — and you had given me some steer on that. Someone needs to tell that to the draftspeople and the people who develop licences for the Water Service, because those are not being written with that in mind, and the Consumer Council cannot get access to relevant information. The Consumer Council will not be at any table where decisions are being made between the Department of Finance and Personnel (DFP) and the shareholder.

101. The Consumer Council has alternatives in mind, but we would not be so bold as to say that they are the only things that you should consider. However, we are far enough along the road to be able to point you to areas that need to be looked at quickly. We will forward a summary to members for information.

102. **Mr Costello**: We have information on the Scottish model. Scottish Water is in public ownership, and the long-term water prices in Scotland will be about 20% cheaper than those in Northern Ireland. That indicates the potential inefficiency that our model has created.

103. **Mrs Gill**: Scottish Water is owned by the Scottish Parliament on behalf of the people. It was able to drive in 40% efficiencies in only four years because of the public ethos and the move behind protecting and making efficient its water service. That is one powerful type of model, among others.

104. The figures are predicated on the English and Welsh average water price, which is 20% more expensive than the Scottish price. Why did we get the English and Welsh price, and not the Scottish one? Perhaps the answer is clear.

105. **Mr Cree**: I thank the Consumer Council for all the work that it has done over the past three or four years. It has certainly not been easy, nor has it been made any easier by the changing figures, about which I want to ask. I do not know who coined the expression about confusion and constructive ambiguity, but they all seem to have been present from the beginning.

106. In the early days, there was no confirmation that those balance-sheet figures were accurate; they were historic figures. To the best of the council's knowledge, have those figures been revised in the light of reality? For example, I guess that the larger portion of the capital assets would be underground; they may, in fact, simply be holes in the ground. That is an important starting point. Are the balance-sheet figures accurate?

11.00 am

107. If the shareholder decides to sell on those figures, there is not really much we can do about it under the current regime. The council made that point that those figures have to be changed, but we have to have a reality check on that. They have to be written down. The difficulty for Government is that, if those figures are quite different — for example, if they end up as £1·5 billion instead of £5·6 billion — suddenly we will have an entirely different picture of the business model. People have quoted many different figures throughout this process.

108. Mrs Gill mentioned the cost of deferring the application of water charges for a year. I have heard figures ranging from £130 million to as high as £300 million. All those figures are in the mix, and that is deliberately confusing. They cannot all be right.

109. **Mr Costello**: We have asked for a definitive figure for how much it would cost to defer the application of charges for one year. The Department says that it will reply to us under the Freedom of Information Act 2000, which I assume will delay the reply for 21 days. We have asked for the definitive figure because the figures given range from £130 million to £300 million.

110. **Mr Cree**: It does strike me that, if it is not directly dishonest, it is certainly deceitful. That is unfortunate. I remind the subgroup that the Government used to tell us that we do not pay water charges. However, they reluctantly came to agree that we had in fact been paying them all along into whatever pot and that that

pot was not ring-fenced. The consumers can hardly be blamed for that.

111. I also want to know whether the Consumer Council has actually seen the business model.

112. **Mrs Gill**: I will answer a few of those questions.

113. Turning to the strategic business plan, UBS was brought in last year to carry out the strategic financial review, which is in the public domain. It was based on Water Service figures in November 2005. Now that the figures are beginning to change, we are being told that those figures were not right. We do not know whether they were right, and yet big decisions were made based on that strategic financial review. That is just not good enough. Even at that point, it was clear that we are not ready to make this move. We need more certainty.

114. We have, under privilege, seen the strategic business plan for September 2006. What the Water Service is telling the shareholder about its inability to do this makes for shocking reading. It is all predicated on the agreement between the Secretary of State and the Treasury on dividends and returns.

115. The Department disputes that there will be a problem; indeed, in a press statement on 25 September 2006, the day of the Long Gallery event — as it is now famously called, Minister Cairns said that the Consumer Council was “scaremongering” and “playing to the gallery” and that we were “utterly without substance”. The business plan was produced only in September, and it leaves us in no doubt that our points have real substance. We have given the subgroup as much information as we can at this point, under privilege, to assert that we do know what we are talking about.

116. We also know that the Water Service is not clear about its Northern Ireland Asset Management Plan (NIAMP). It has two NIAMPs and is now working on its third iteration. At this point, it does not have a full asset register, yet decisions are being made on it.

117. Those discussions are all happening in closed, dark rooms. They are not happening in the public domain, but it is the public that will be expected to buy this. The Consumer Council is hamstrung and is not able to put out there the information that it should. Perhaps under the Freedom of Information Act 2000, someone should ask for the independent review that the council commissioned, of which we have been able to give the subgroup only partial sight. It shows that the council and the Assembly need to take control of this issue to ensure that the model is right.

118. Five months away from introducing a reform of this scale, there should not be a range of variance in the figures; they should be pretty precise by now. Neither the Consumer Council nor its partners want any delay in the public investment — the Confederation of British Industry (CBI), for example, emphasises the importance of proceeding. The Consumer Council is not being unguarded, unruly or foolhardy; nor are we asking for the process to be cancelled. We are asking for a deferment and a commitment to cover the cost for next year. Let us subject the plan to independent scrutiny to make sure that we decide on the model that we want, as opposed to being forced to buy something that is not going to work.

119. **Mr Costello**: On the point about the cost of delaying the process, water charges will be phased in: a third in year one, two-thirds in year two. If the phasing were done away with, year one deferred and the full charge levied in year two, the same amount of money would still be forthcoming.

120. **Mr Dallat**: Thank you for the presentation. During the lifetime of the last Assembly, the Public Accounts Committee looked in detail at the Water Service and discovered that 35% of water leaks before it gets anywhere. The service was pumping out sewage onto our beaches, buying property to be developed where there was no facility for treatment works. Is it the view of the Consumer Council that this should be a part of an economic package, given that there was 35 years of neglect, during which money was diverted to security and other things?

121. I recall that the Consumer Council recently did terrific research on credit cards and revealed the differences in the treatment of customers. From your presentation this morning, it seems that this new company is planning something similar, by which it will crucify people who are not signed up to direct debits and credit transfers. It is going to punish those least able to pay. Is that something that the Assembly should take seriously, given that our primary function is to iron out the inequalities in society?

122. **Mrs Gill**: I shall start with the economic package. The Consumer Council calls explicitly for cross-party agreement to secure the financial commitments required to defer this process and allow it to be corrected. We know that the Secretary of State and the Minister have stated clearly that they will not delay, that they intend to proceed with it. However, we ask the subgroup to please think about that. If the process is not right, the implications will be far-reaching. If at the end of the process, the council finds that its fears were groundless, at least it will have investigated them. We believe fervently that we are not scaremongering.

123. As to water leakage, we might find that the Treasury still has to be paid. The Water Service says that it cannot meet its efficiency targets; that it can only do so much; that it cannot meet all its targets with the money it has. The standards of water quality that we have been promised for all this money — £3 billion — might go down, and the amount of investment in capital works carried out might go down. That is all to make it fit the formula. We are concerned that the frantic work that is ongoing at the moment between shareholders and the Water Service is to try to make it all fit within the Treasury deal. That needs to be carefully examined.

124. With respect to leakage, £3 billion is being invested. Members of the subgroup should realise that the level of leakage will be reduced only to 24% as a result of all that expenditure. Other European countries and even ascending countries, such as Hungary and Poland, are achieving 5%, 9%, and 10%. In spite of all this money, we are going to achieve only 24%, yet consumers will have to carry the risks. In a recent interview the Water Service maintained that people would not waste water because, if they did, their bills would rise. If this is all about sustainability, that is a fairly perverse incentive. People here are ahead of the Water Service. If this process is to go ahead, they want meters. They do not want to pay on the basis of the capital value of their houses, because they have no control over that.

125. The system of debt recovery is so ferocious because the money is needed to secure the revenue stream. My daddy, in his house, is actually classified as "rock bottom" on that map. I have a problem with that. People are being classified in a particular way and having values attributed to them without those values even being questioned. Should we change the name of that banner "rock bottom" to something else? This process is being run from a business point of view as opposed to a people point of view. There has been no consultation. We asked the Water Service when it will consult about that, and it said that it has no intention of doing so. We are told that one of the clinchers for the deal with Crystal Alliance was its smart-debt system. The Consumer Council believes that is a terrible state of affairs. It is rock bottom.

126. **Mr McNarry**: You are very welcome. I am glad that Hansard is recording this because I have just run out of ink trying to keep up with the pair of you. You are not scaremongering but you are scaring the hell out of the Government and, in doing so, you have scared the hell out of me this morning. If Northern Ireland is to inherit water charges — and I mean "inherit" — before anything can be done we, as elected representatives, are in serious trouble. We will be on the spot and the Consumer Council will give us a hard time, as it has every right to do. What you said was encouraging, but I hope that it can be acted upon.

127. Chairman, I am concerned that badly needed information is not being supplied, and I wonder whether the Committee can do anything about that by writing to the Secretary of State. Is information being deliberately withheld? The

Freedom of Information Act 2000 is meant to provide transparency. I understand the timescale involved, but questions have been raised here today. Had Eleanor and Steve received answers to those questions, they might have provided us with them. Perhaps we should consider exploring whether we can get the answers that relate to our report. It is important, and I hope that members will support me on that point.

128. Unless somebody else has asked the question, in which case it will be recorded in Hansard, what is the current status of metering and what is its future? What impact will the deferment being sought by the Consumer Council have on other services; will they suffer in order to pay for that deferment?

129. If you have not already done so, would you consider taking up the issue of septic tanks for rural areas? I listened intently to what you said about the Go-co, and I understand that from next year there will be a charge to clean septic tanks. That will create immense hardship in rural areas where people do not receive the services but they pay rates. Until now, there has been no charge. There are thousands of septic tanks throughout the country, and the planners now insist that high-cost models of septic tanks be introduced. The new economically friendly septic tanks will cost £2,400 rather than £600. I understand that the charge to clean the tanks is likely to be in the region of £250 each time. The chief executive of the Water Service told me, in writing, that that is in preparation for the establishment of the Go-co. The people who are affected receive an immediate service and accept it, but it is an important aspect of the overall scene.

130. **Mrs Gill**: Before answering your questions, I have a general point: rather than allowing the draft Order to be passed and then trying to do something about it, the Consumer Council calls on you to get it deferred. We can then ensure that everything is satisfactory and not have to chase up those matters.

131. The metering strategy falls well short of what is required. The Consumer Council does not agree that a charging system based on a home's capital value is the best way to pay for the water that is used. It is unfair, takes no account of the ability to pay and does not encourage people to use water in a sustainable way.

132. The Go-co will implement its metering strategy next year. With regret, I must inform the Committee that despite our legislative responsibility, we were not consulted on the Water Service's plans for the implementation of those meters. Solely through our diligence and pushing for meters did we discover that the Water Service has only now brought in someone to examine what its metering strategy will be — but how to apply for a meter from 1 April 2007, if you qualify, nobody knows.

133. We had to be forceful to ensure that the individual who will produce the metering strategy listened to us and engaged respectfully with the statutory voice. That metering strategy causes us great concern. Given that we do not even know how the tariff for it will be arrived at, those people who think that it will be a better way forward may be greatly confused.

11.15 am

134. The Consumer Council has been advised that deferment will have an impact. The public services aspect of the issue has been built on freeing up the money that is currently spent on water services and making customers pay for their water. The idea is that that freed-up money would then be used to pay for other public services. As part of the financial deal we therefore want that commitment covered for next year to give the Assembly time to agree the best way forward. Under the deal, the Treasury, and not us, should pick up that cost.

135. Where rural areas are concerned, under this draft legislation, there is no duty on the Go-co to consult with the Consumer Council. The council is closely involved in consultations on what we pay for our gas and electricity, but there is no legislative remit for the Go-co to consult with us on water prices. We met with the chairman of the Go-co, and his view was that we would get on with dealing with complaints and it would get on with delivery. We had to remind him that it would not work that way because anything that has an impact on

consumers should be talked through. We should not wait until things go wrong; instead, we should give advice about what would work best. The council should have a positive, trustful input into those policies, as opposed to doing something that is similar to waiting to mark homework. That would not help anyone in the long run. Therefore agreeing all of a sudden to collect money for water services, even though it has not been collected for years, is, in our view, securing another income stream for an unsustainable and unviable Go-co.

136. **The Chairman (Mr McClarty)**: Thank you very much. I am sorry, Mitchel; you had not indicated that you wished to speak.

137. **Mr McLaughlin**: I had, but I thought that you had not seen me.

138. **The Chairman (Mr McClarty)**: I thought that you were winking at me.

139. **Mr McLaughlin**: I usually thank people who give evidence to the subgroup. However, that may not be the appropriate response to your evidence, which you gave with such rigour and discipline. One member has already described it as a devastating critique of the situation that we face.

140. Affordability, the legacy of underinvestment and price pegging are all issues that the parties will focus on when they attempt to develop a common position in the upcoming meeting with Treasury representatives. It is essential to set out the Assembly parties' position on this issue — it has to be faced —if we are to win the argument on deferment.

141. The evidence poses two obvious options: either we resolve these issues and the Government respond to the cost implications in advance and allow the Assembly to develop its own approach to it, or we are set up for failure. That is the stark reality of what has been presented, and it is incumbent on the parties to take heed of the evidence.

142. I am not attempting to speak for any other party, but the evidence makes clear that there is an absolute duty to oppose the present proposals on the basis that the parties are equally determined to face the issue and get the best result. A clear demand is emerging for the Government to put their money where their mouth is and create a level playing field for us, the upcoming Assembly, and a future Executive. They should give us a chance to deliver a Programme for Government and not destroy us before we start.

143. **Mrs Gill**: We have been told continuously that water reform needed to be put through now because the local parties wanted the Government to get it sorted out before the Assembly was restored so that local politicians would not have to make any hard decisions.

144. I thank you all for taking the time to listen to us. The proposed legislation is counter-intuitive to what people are saying. We believe that if this legacy is allowed to go through it will haunt us for a long time. It seems unreasonable that, in asking for the different things that are connected to affordability, and so on, the Minister has stridently said that he does not want to commit a future Northern Ireland Assembly to this. However, he is committing it to a Go-co, a £3 billion capital investment, unpredictability in debt, and infraction costs. Everything will all be wrapped up and passed on, and the proceeds will go out. That is a much bigger problem. Therefore we thank you for giving us your time.

145. **The Chairman (Mr McClarty)**: Thank you. That was a very interesting and thought-provoking presentation.

The subgroup met in private session from 11.20 am to 1.00 pm.

Adjourned at 1.00 pm.

Appendix 3

Section 1:
Written Evidence Submitted by Witnessess

Consumer Council for Northern Ireland

WATER REFORM – HOW WELL IS THE CONSUMER PROTECTED?

PRODUCED FOR THE PREPARATION FOR GOVERNMENT COMMITTEE BY THE CONSUMER COUNCIL FOR NORTHERN IRELAND

20 OCTOBER 2006

Water reform is central to the wellbeing and competitiveness of our local economy, now and in the future. Every business here will have to pay additional charges, and every household will have less disposable income for other goods and services at a time when consumer confidence is rising and needs to be maintained and developed. The purpose of this paper is to identify the key risks and issues for consumers and business of the introduction of water charges.

It is our clear view that if the draft Order is passed without amendment then the risks for every home and business are unacceptably high particularly after 2010 when consumers are expected to take on the full cost of the system. Further, there is the clear danger that we could repeat the mistakes of the past, such as the privatisation of electricity, if we do not take time to get this fully assessed and get it right.

The draft legislation is fundamentally flawed in our view and must be assessed in the context of the other critical elements of water reform which include integrally related matters such as: the licence, the strategic business plan and the governance letter. Only then can a full assessment be made of water reform and its implications for every household and business in the short and long term. The Consumer Council believes that the key issues and risks need to be resolved in an open, transparent and meaningful way by our local politicians and engaging the public fully.

The purpose of this paper is to present our view of the key risks to consumers inherent in the proposed draft Water and Sewerage Services Order and to identify actions which we believe need to be taken before passing of the Draft Order. It is based on information and analysis as at August 2006. Any further work since then between the Department for Regional Development, the Department of Finance and Personnel and the Water Service has not been shared with the Consumer Council.

KEY LEGISLATIVE ISSUES AND RISKS FOR CONSUMERS

1. Passing Draft Order Without Amendment as Order in Council

Within the current legislative proposals consumers are carrying all the risks. We all need to get water reform right for consumers now and in the future, not just get it done. The Consumer Council is concerned that water reform is the only one significant and controversial piece of legislation that the Secretary of State is not prepared to hold back for the Assembly. This has cross-party and cross-sectoral support. Proceeding with the draft Order has far-reaching implications, many of which will be irreversible if is accepted without amendment by the Assembly in waiting or by Westminster in its absence.

The problem of Orders in Council as a mechanism of Parliamentary democracy was recognised in the House of Commons on 16 October 2006 when a member asked the Secretary of State:

> *"May I have an assurance that during that period (now until March), there will be a moratorium on any significant legislation in order to allow the Assembly to pick up the reins on such decisions?"*

The Secretary of State responded:

> *"On Orders in Council, there are some vital matters still to take forward. Water charges is one…..However we will certainly look at the controversial orders…. "*

Action Needed:

1. The Draft Water and Sewerage Services Order is controversial and requires amendment therefore this legislation should not be dealt with as an Order in Council where it cannot be properly scrutinised, debated and amended.
2. The draft Order should be dealt with by the Assembly or, in its absence, by debate or amendment in Westminster, but after 24 November 2006

It is acknowledged that delaying the introduction of water charges in order to get the system right will have a bearing on the financial package agreed in 2005 between the Secretary of State and the Treasury. The Consumer Council is concerned that the risks associated with the financial assumptions underpinning the water legislation, the establishment of the Go-Co and the new water charge will be greater than the estimated costs of the funding gap caused by any delay. (This is detailed below under "Rising Prices").

Just 5 months from the planned introduction of water reform there is great discrepancy in the Government's estimates for the "big hole in the budget" should a delay occur. The Minister for Regional Development on 4 October 2006 estimated the gap to be £130 million - £180 million in 2007 – 2008. The Secretary of State on 16 October 2006 increased the estimate to £200-300 million, 2007 - 2010. If we get the financial model underpinning the Go-Co wrong then the costs will have to be met by consumers through higher bills or taxpayers through reduced public services in the future as confirmed to the

2

Consumer Council by Minister Cairns. It is within this context that the draft Order must be delayed to consider all these issues.

Action Needed:

1. The detail of the financial package between the Secretary of State and the Treasury in 2005 must be made available to local politicians and all interested parties.
2. The 2005 Secretary of State and Treasury agreement must be renegotiated by the local politicians in the context of the St Andrew's Agreement so that any shortfall arising from delaying the draft Order to make amendments is centrally funded in 2007 – 2008. This is in keeping with the statement made by Lord Rooker responding to a Question relating to this matter on 16 October in the House of Lords when he said:

   > *"I draw the attention of the noble Lord …. to the fact that the Chancellor will discuss with the parties the financial structure and the consequences of the St Andrew's agreement for Northern Ireland. That will cover the matters that he has mentioned."*

2. Rising Prices

From 2007 – 2010 bills will be "pegged" to the England and Wales average and will be phased in over 3 years. From 2010 onwards all protection in legislation disappears and consumers are exposed to the full risks and costs of the system.

An independent report commissioned by the Consumer Council in August 2006 based on the Water Service's draft Strategic Business Plan states that the water service business case is "insufficiently supported" and "unsustainable in the medium term without significant price increases". Indeed Water Service itself in June 2006 advised the Department for Regional Development (DRD) that, without pegging, the average bill in 2010 would rise by approximately £150 to nearly £500. DRD contests the argument that there will be significant price increases. We cannot give confidence to their assertion as the Consumer Council has been excluded from sight of, or input into, the Strategic Business Case development since we made our reservations about the progress on these matters public to the local parties at a Stormont event on 25 September 2006.

Action Needed:

1. In order to ensure customer safeguard and assurance regarding prices post-2010 provision must be made for the price to be capped to the England and Wales average with an agreed variance of 5 – 7% or until 2015 (whichever happens first).
2. This price protection should not give the Go-Co cover from meeting its efficiencies. It should only be in place until such times as the efficiencies would be driven through, the capital work programme would be managed and delivered and all other risks including bad debt are identified. Consumers should not pick up bad debt automatically.

The fact is that consumers do not know what they are being expected to buy, nor have they had independent scrutiny and review to provide the necessary confirmation that consumers that they are not exposed to unacceptable risks and ownership of an unsustainable and unstable Go-Co. There are key elements driving the prices for services delivered by the Go-Co after 2010 when pegging disappears, including:

a. <u>Treasury Dividend and Borrowing Rate Package, 2005</u>
Consumers carry high and unacceptable risks if the Go-Co's Strategic Business Planning and Financial Modelling and Assumptions are not correct or are not delivered. There is an absolute lack of clarity, openness or transparency to consumers around these financial issues. The Go-Co will be required to deliver efficiencies in order to pay a dividend to Treasury. Without this clarity independent experts advise us that consumers through the Go-Co will have to pay some £58 million to Treasury in 2007 – 2008, doubling to some £112 million to the Treasury in 2009/10 and potentially continuing to increase year on year. This money will not stay here but will only be available to be borrowed back. Any shortfall in the Go-Co's efficiencies required to deliver a dividend to Treasury will have to be paid for by a reduction in other public services and/or higher water bills.

The rules governing the delivery of the dividend are contained in an agreement made between the Secretary of State and the Treasury in 2005. The Consumer Council commissioned independent analysis on the Capital Structure of the Go-Co as set out by Water Service in August 2006 which is cause for great concern:

> *"The current version of the SBP (Strategic Business Plan)* ***does not set out a sustainable future for NIWL*** *(Northern Ireland Water Limited). The assumptions on which it is based – which appear to have been set by government – are not appropriate. …… The dividend payable to government is 5.8% of the RCV (Regulatory Capital Value or the Assets). It is not quite clear, but seems to be the case, that this 5.8% is a real return (ie is applied to a revalued RCV each year). In addition as borrowing increases the interest cost of the debt is also 5.8% (probably in real terms,* ***which is very expensive debt****).*
>
> ***As a result there is a major cash drain on the company (the cash cost of capital in 2007/8 is £59m and rises to £112m in 2009/10 (=dividend + interest on government debt). This directly reduces the value of the equity in the business and increases the amount of additional debt that DRD is required to fund to deliver the outputs."***

It is our concern that the money collected from consumers here will not be kept here to fund other public services – it will go back to Treasury and only then be borrowed back.

4

b. Efficiencies

The Consumer Council has repeatedly posed the questions “Who bears the risk if the efficiencies are not challenging enough or are not delivered by the Go-Co?”, “What is exposed to the risk if the dividend can’t be paid by the Go-Co to Treasury?” and “Who gets the benefit of any surplus delivered by the Go-Co if they out-perform efficiencies?”. These questions remain unanswered in our view. The Consumer Council was advised by DRD that the Go-Co would be required to deliver 35% operating efficiencies and 27% capital efficiencies in order to meet the demands of the Treasury agreement. They have since rolled back on this position claiming these efficiency targets to have been *“…set to focus the company in planning its strategy to meet the ministerial policy objectives.”* Our independent analysis in August 2006 is cause for great consumer concern when it states on operating cost and efficiency:

> *“…much is made of the £11.7m or 19% real savings in the staff costs over the three years to 2009/10. However, analysis suggest that this saving is offset by a three year total of £11.6m in performance related pay and a staggering £26.2 m over three years in voluntary early retirement costs….Whilst the latter may be seen as a one off, the former are certainly not which begs the questions as to whether or not there have been any real savings in staff costs.*
>
> *Many of the other Go-Co specific additional costs need to be subject to considerable review to see whether they are correct as they amount to close to 20% of total revenues. To state so categorically that they are not in any way controllable might be seen as being questionable.”*
>
> *“No evidence is provided to justify the £10m (consultant costs for 2006/07) and whether it is in line with consultancy costs for similar projects”*

c. Bad Debt

All bad debt is automatically passed through to customers’ bills within the financial model for the new Go-Co. The risk of the estimate of bad debt being incorrect or bad debt being mismanaged is intolerably high. There is no incentive on the Go-Co to manage the debt if it is allowed from the outset to be passed automatically through to customers’ bills. The Consumer Council’s independent report identifies that a key determinant of success or failure of the Go-Co and risk for consumers will be the level of bad debt currently set at 5%. In January 2005 the Consumer Council identified 5% as too low and asked Minister Spellar to undertake further analysis and increase the anticipated bad debt assumptions in the financial model. This has never occurred. Our view has been supported by the independent experts who state:

> *“The assumption of 5% for domestic and 2% for non-domestic is probably on the optimistic side – a much higher level of bad debt would be a key sensitivity to be tested”.*

5

Again the Consumer Council cannot give confidence that this issue has been addressed since we have been excluded from any further discussion on the Strategic Business Plan.

d. PPP Contract Commitments

Current commitments contained within the 2 PPP contracts, Alpha and Omega, valued at £110 million and £120 million respectively, are to be automatically passed through to customers' bills within the financial model for the new Go-Co. Consumers do not know what these commitments are, the efficiency levels to be delivered, or the risk to consumers if not delivered. These contracts have not been made available and therefore the Consumer Council cannot give confidence or assurance that this risk is managed.

Action Needed:

1. There must be full and open disclosure, and independent review, of all the financial assumptions and modelling work underpinning the Strategic Business Plan for the new Go-co to ascertain the level of consumer risk and financial stability and sustainability of the Go-Co in the long and short term.
2. The detail of the financial package between the Secretary of State and the Treasury in 2005 must be made available to local parties and all interested parties. It should be open to independent review on behalf of consumers.
3. Customers must be clearly informed of how much of the money they are paying in water charges will be going back to Treasury year on year and lost to Northern Ireland.

3. Who Gets the Benefits of Land Disposal?

Water Service Land and Assets are valued at around £5.6bn. It is essential that these are managed and disposed of in a way that delivers benefits to consumers and taxpayers who have paid for them. At present there is no agreement on who benefits from the proceeds of land and asset disposal. This is a huge risk for consumers now and in the future. It is known that £1bn was lost to consumers in the privatisation of electricity contracts here. Further there are no agreed rules governing the management and disposal of land and assets to ensure that decisions are taken independently from the Shareholder (the Department for Regional Development). The Regulator's role is clearly fettered in this regard within the draft Order.

Action Needed:

1. The legislation and licence must be amended to ensure that consumers benefit fairly from proceeds resulting from land disposal. Agreement on this must follow a full and informed public consultation lead by the Assembly.
2. The legislation must be amended to ensure that the Regulator has a clear role in assuring any proposed disposal of land by the Go-Co up to 2010, and thereafter that the Regulator has full authorisation for land disposal within an agreed set of principles and rules.

4. Protecting Those Who Cannot Afford To Pay

Government social protection is an imperative for those who cannot afford to pay water charges and yet there is no copper-fastened guarantee in legislation that this will be funded centrally after 2010.

The cost of paying the Affordability Tariff in 2010 will be around £50 million which, if not centrally funded, will result in the Government having to increase average bills by 10% or reduce other public services to pay for it, or remove protection for 200,000 vulnerable households.

This will lead to greater levels of poverty and overindebtedness. In England and Wales the number of people threatened with legal action for not paying their water bills in 2005 – 2006 has risen by 43% in one year. The value of bills unpaid for less than a year surged to £446 million – a rise of more than 10% in one year. One in four County Court judgements in England and Wales in 2003 - 2004 involved water companies chasing customers for non-payment.

Action Needed:

1. The legislation must be amended to ensure that the affordability tariff will remain in place as it is in terms of its scope, and be underwritten by the Government rather than by consumers or taxpayers post 2010.
2. There must be full and open consultation and an independent assessment of the equality impacts of any key policies being put in place by the Go-Co especially in relation to the areas of billing and recovery of debt which will impact on consumers' ability to pay.

5. Consumer Regulation and Representation

It is important that consumer regulation and representation is, and is seen to be, fully independent and unfettered. The Regulator is not being provided with full authorisation and power from the Department for Regional Development from 1 April 2007. This will result in the fettering of the powers of the Regulator particularly during the critical three year transition period before taking over economic regulation and price control from April 2010. The Regulator has described this as "Shareholder Regulation" and exposes serious conflicts of interest on the part of the Department for Regional Development.

Action Needed:

1. The legislation and licence must be amended to reflect the full powers of the Regulator from April 2007 particularly in the areas of sewerage and waste water services and land disposal.

Consumers require a common and consistent approach to consumer representation, complaint handling, billing disputes and redress across all the utilities of energy, transport and water. This week in Great Britain, the Department of Trade and Investment is bringing forward legislation on consumer representation and redress which seeks to replicate the multi-utility, efficient and effective model currently in Northern Ireland. The water legislation restricts the powers of the Consumer Council in the critical areas of complaint handling and redress, and does not require the new Go-Co to consult with the Consumer Council on issues affecting or impacting on consumers. Energy consumers here are provided with better levels of consumer protection in complaint and billing handling than consumers of water and sewerage services.

Action Needed:
1. The legislation and licence must be amended to bring water and sewerage services consumers into line with the protections afforded in law here in energy.
2. The legislation must be amended. Billing dispute authorisation must be removed from the legislation and the duty for the Go-Co to consult must be included.

Conclusion

The Consumer Council believes that the legislation must be subject to careful scrutiny and amendment before it is enacted. In making this statement, we acknowledge that water and sewerage services must be paid for and we recognise that funding shortfalls arising from a further delay in the water reform timetable will need to be addressed. However we believe that the mechanisms exist to meet these shortfalls in the context of the St Andrews Agreement and the financial agreement between the Secretary of State and the Treasury.

The Consumer Council is firmly wedded to the principle of getting it right. We are in agreement with the Secretary of State when he asks for the draft Order not to be rejected by the local parties outright. We seek to have it amended in the best interests of consumers. For local parties to accept the draft Order now on the basis of working through the details later will, in our opinion, be detrimental to consumers and taxpayers now and for a long time to come. We are not looking to “duck the issue” but to make sure that any water charging system is fair, affordable and sustainable for every consumer and business here.

General Consumer Council for Northern Ireland
20 October 2006

Consumer Council for Northern Ireland

Principles

- We must pay for all public services including water and sewerage services
  - Fair, affordable and sustainable
  - Getting it right, not getting it done
- Need NI Assembly to get it right
  - not Order in Council
  - will be your problem, your funding gap, your debt
- Cross-sectoral support – social, business
- Risk and Cost of Getting It Wrong Greater Than Taking Time to Get It Right

Cost of Getting It Wrong

- Economy
  - Paying money out of NI to pay debt to Treasury
  - Damage to competitiveness
  - Falling consumer confidence and spending
- Business
  - Higher costs and escalating bills
  - Barrier to private sector expansion and new starts
- Customers
  - Rising total household bills
  - Lack of confidence
  - Less money to spend
  - Rising debt especially after 2010 - and rising bills

Where are we now?

- SofS/HMT Financial Agreement, 2005
- Draft Legislation – finalised and laid in Parliament
- Licence – work in progress
- Business Plan – work in progress (3rd version)
- Governance Letter - ?

Action Needed:
Independent review to give full assessment
of cost and risk to consumers, business, economy

Legislation

- Short term – 2010 cliff-face
- Flawed – price, affordability, land, protection
- Creates unfettered monopoly
- Can't be passed in isolation

Action Needed:
1. Defer Draft Order for Local Assembly or Amend
2. Assembly decide way forward including how to pay for public services e.g. Capital value? Rates? Usage? Taxation?

Cost of Underinvestment

- Customers and businesses of today should not be pay for past capital backlog
  - £1.4 bn approx capital backlog of £3 bn investment (£80 on each bill)
  - Investment 15 years behind England and Wales
  - Infraction and compliance costs and risks - unknown

Action Needed:
Treasury to Pick Up Capital Backlog Costs

Go-Co Stability?

- Strategic Business Plan (SBP), Sept 06

  "The current version of the SPB does not set out a sustainable future for NIWL".

  "Insufficient evidence …. Significant price increase"
- Whp carries the risk??
  - £58 m dividend 07/08 to Treasury - £600 m approx by 2014/15
  - Efficiency shortfall - £1 on each bill for every £1m shortfall
  - 5% bad debt – too low but passed on to customers' bills
  - £220 m PPP contracts – commitments passed on to customers
- Debt recovery – worse-off chased down first?
  - "Rock Bottom" half the time to pay up or face legal action

Action Needed:
1. Independent Scrutiny of Go-Co Strategic Business Plan and Key Policies
2. NI Assembly to secure sustainable business model

Affordable Price?

- Affordability Tariff
  - 200,000+ vulnerable households
  - Protection centrally funded – up to 2010
  - £50m funding gap in 2010 – reduce other public services, 10% increase in bills or removal of protection
  - 1 in 4 County Court judgements
  - 43% increase in legal action letters 2005/06 in England and Wales

Action Needed:
Legislative imperative for Government to fund vulnerable consumers – not other consumers

Land: Who Benefits?

- £5.6bn – who gets proceeds? Who has control? Will they stay in NI?
  - Electricity Privatisation - £1bn lost
- Transfer of Ownership Outside Government Control
  - If no Assembly, no public voice enshrined in decision
  - Thames Water - £3.2bn increase in 6 years

Action Needed:
Land disposal proceeds to be kept within Northern Ireland and managed on behalf of consumers

Way Ahead #1

If no deferment – Secure Draft Order amendments and commitments from Treasury

1. Price Protection Options
   - Capital backlog paid by Treasury (£1.4 bn)
   - Price pegging to 2015 (£140m approx)
   - Dividend suspended by Treasury to 2015 or until Go-Co efficient (£600 m approx)
   - Cost of borrowing reduced (£62 m approx)
2. Affordability
   - Centrally funded (£50 million + per year from 2010)
3. Land disposal
   - Proceeds kept within NI: re-invested and/or lower bills
   - Consultation before ownership change
4. Consumer Protection
   - Unfettered, independent, consistent multi-utility approach

Way Ahead #2

1. Secure deferment for the time needed for NI Assembly to get it right
   - Commitment from Treasury to pick up public services funding gap (£120 m - 62.7 m customer's money and £58m to Treasury; Government estimate £130 – £200m)
2. Under-Investment
   - Commitment from Treasury to pay for capital backlog or significant % of it (approx £1.4 bn)
3. NI Assembly to independently scrutinise and review
   - Financial model, ownership, business model, investment, costs, risks, stability, best way of paying

Conclusion

1. New Assembly needs to be assured of what it is being committed to
   - Highest rising cost to household bill?
   - Public and cross-sectoral confidence?

2. Not “ducking the issue”
   - Support future Assembly need to spend to get public services we deserve

3. Seeking support and action from all parties
   - Preparation and Programme for Government
   - Financial package with Treasury

Letter to Preparation for Government Committee and Economic Sub-Group

26 October 2006

We, the undersigned, accept that quality public services underpinned by sound infrastructure, including water and sewerage services, must be paid for. We must invest in and reform our public services and infrastructure in order to build a sustainable economy underpinned by efficiency, effectiveness and value for money.

However, we believe that:

1. Consumers and businesses should not be asked to sign a blank cheque. Any new water charge must be fair, affordable and sustainable;

2. Consumers and businesses must not be expected to pick up all the costs of past lack of investment, poor policy and management and unfair costs such as roads drainage and future risks such as bad debt;

3. Government must pick up the tab for, or underwrite the costs for, those who cannot afford to pay – not other consumers;

4. Water is one of our most precious resources and must be managed in a way that encourages responsible and sustainable use. It should not be paid for on the basis of the capital value of our homes.

We are firmly wedded to the principle of getting this right for consumers in the short and long term. We believe that the draft legislation has key flaws (described below), is opposed across all local parties and sectors in its current form, and must be subject to careful scrutiny and amendment before it is enacted.

We believe that the whole policy of water charges, including the legislation, should be a matter for the NI Assembly. Therefore the Government should not proceed any further with the draft legislation until these key issues are addressed. The draft legislation must be put on hold until it is fully and independently assessed and scrutinised in the context of the other critical elements of water reform which are still under development and not within the public domain at present such as: the licence, the strategic business plan and the 'governance letter'.

In making this statement, we acknowledge that consumers must pay for water and sewerage services and we recognise that funding shortfalls in public services arising from a further delay in the water reform timetable will need to be addressed. However we believe that the mechanisms exist to meet these shortfalls in the context of the St Andrews Agreement and the future financial agreement between the Secretary of State and the Treasury.

Consumers must not be expected to take on all the costs and risks of water and sewerage services. There is the clear danger that if we do not take the time to get this right then we could repeat the mistakes of the past, such as the privatisation of electricity.

Within the current draft Order there are four key areas which require guarantees, underpinned by legislation, if consumers are to be protected particularly from 2010 onwards when they are expected to take on the full cost and risk of water and sewerage services:

1. **Price protection** against unacceptable risks such as inefficiencies in the new Go-Co, inability to pay the dividend to Treasury, bad debt, PPP contractual commitments etc.;
2. Centrally-funded '**affordability tariff**' for the vulnerable and disadvantaged who genuinely cannot afford to pay;
3. **Land and assets** valued at some £5.6bn (currently held by the Water Service) must be managed and disposed of in the interest of consumers and taxpayers who have already paid for them, and not in the interests of the future new owners of the Water Service; and
4. The Utility Regulator's **powers** and those of the Consumer Council must be fully independent and unfettered in all regards to ensure proper consumer protection.

Signed by:

Voluntary/Community Sector

- Advice ni
- Age Concern
- Citizens Advice NI
- Friends of the Earth
- Help the Aged
- NICVA
- NI Environmental Link
- Voluntary Service Bureau

Political

- NILGA

Business

- Confederation of British Industry
- Federation of Small Business
- Institute of Directors
- The Northern Ireland Chamber of Commerce and Industry

Unions

- ICTU
- Ulster Farmers Union

Consumer Representation

- Consumer Council for Northern Ireland

Appendix 3

Section 2: Additional Follow-Up Information submitted by Witnesses

BRIEF OVERVIEW OF BUSINESS MODELS FOR WATER IN WALES AND SCOTLAND

PROVIDED BY THE CONSUMER COUNCIL FOR NORTHERN IRELAND

Welsh Water

Welsh Water - is owned by Gas Cymru a single purpose company with no shareholders and is run solely for the benefit of customers. The business model aims to reduce Welsh Water's asset financing cost and improve service delivery by employing contract partners for each distinct activity of the business. The assets and capital investment are financed by bonds and retained financial surpluses. They supply water and sewerage services to 1.2 million households and to over 100 thousand non-domestic customers in Wales and some adjoining parts of England. They have 27,000km of water supply mains network.

Annual report of 2006 reported customer dividend of £19, regulatory capital value of £3billion with net debt of £2.4 billion, funding in place for the Company's £1.2 billion investment programme to 2010 (to benefit customers and the environment).

In 2005 Welsh Water achieved 94% on Ofwat's Overall Performance Assessment and was ranked equal 1st among the 10 Ofwat regulated water and sewerage companies. 2006 their OPA was 93%.

Capital expenditure was £238 million. Financial reserves (RCV less net debt) stand at £683 million in 2006. The bad debt charge for the year was £8 million represents less than 2% of annual turnover.

Total revenue was 553.5m, operating costs were £360m and financing costs were £190m, profit after taxation was £16.1m.

Average household bill for 2006/07 £337 and for 2009/10 £398

Scottish Water

Scottish Water was formed in 2002 and is a publicly owned business, answerable to Scottish Parliament and the people of Scotland, its a new public sector model in the UK water industry and aims to be as efficient and effective as water companies in private sector.

Scottish Water is regulated by the Water Industry Commission which has confirmed that Scottish Water delivered 90% of its targets by March 2006.

They deliver water and waste water services to 2.2million domestic and 130 thousand non-domestic customers in Scotland (an area one third the size of Britain).

Scottish Water has beat an efficiency target set by its regulator by running the business for over 40% less in 2006 than in 2002.

In 2005/06 operating costs of £674.2 million, capital investment £660.3million. Turnover of £1,019million, profit £134.8million.

Average household bill for 2006/07 £337 and for 2009/10 £308

SUMMARY STATISTICS RELATING TO BAD DEBT AND WATER AFFORDABILITY

PROVIDED BY THE CONSUMER COUNCIL FOR NORTHERN IRELAND

Bad Debt/Unpaid Bills in Great Britain

1 in 5 homes (4.4 million) in Great Britain in arrears to their water company of some £1 billion.

¼ of all county court judgements are water companies chasing debt and arrears. In 2005/06, over 137,000 county court judgements were issued for bills non-payment.

In 2005/06, the level of household water bills unpaid for less than 12 months was £446 million. Older debt (outstanding over 12 months) totalled £490 million (£30 million more than in 2004-05 – a 6% increase).

In 2005/06, 8.3 million letters warning of legal action were sent to households – an increase of 43% compared to 2004/05.

Bad debt to water companies has risen significantly (£960 million in 2005/06). Annual non-recoverable debt of £164 million.

Bad Debt Forecasting for Northern Ireland

The financial model for the Water Service provides 5% provision for bad debt. This is the equivalent of £15 million in 2007/08 of a total revenue requirement of £307.7 million. This assumes a normal working level. It is our considered view that it should be 10 – 15% (a point raised by us and recognised by John Spellar in January 2005).

Water Affordability in Northern Ireland

One in four households in risk of water poverty (defined as spending more than 3% of income on water bill).

An average water charge of £340 would mean that households would need a <u>disposable</u> income of £11,333 to avoid water affordability problems. This is approximately £1,800 - £2,500 higher than in England, Scotland and Wales where household incomes would need to be between £8,800 and £9,533 to provide water affordability.

Consumer Council – Draft Water and Sewerage Services (NI) Order

Chairpersons and Members of the Economic Sub-Group
Preparation for Government Committee
NI Assembly
Parliament Buildings
Stormont Estate
BELFAST

Dear Members

Draft Water and Sewerage Services (Ni) Order

Thank you for providing the Consumer Council with the opportunity to address you on the above issue in advance of your recent meeting with the Chancellor of the Exchequer in London.

The Consumer Council, officially supported in writing by all key partners across the business, social, environmental and political sectors, called on all political parties to collectively press the Secretary of State for deferment of the above Order to allow the NI Assembly time to get water reform right. We recognised that this deferment would cause a funding gap next year but emphasised that the cost of getting it wrong was much greater than the estimated cost of introducing water charges without proper scrutiny. We also advised that the draft Order should not be looked at in isolation. It needs to be scrutinised in the context of the other key elements of the licence, Strategic Business Plan, Estate Management Plan and Governance Letter. It is worth noting that there will be no consultation on the Strategic Business Plan and Governance Letter. Further, the Licence will not be available for consultation until late November or early December which is just 4 weeks before the commencement of establishment of the Go-Co.

We are very pleased that all-party agreement was reached on this and that you have included the deferment of water charges on your agenda for resolution with the Chancellor. We are aware that this meeting was very much the opening position upon which you wish to develop your proposals further on behalf of the public and consumers. We are asking you to ensure that the issue of deferment and covering of public service funding gaps is kept on the agenda and resolved urgently.

We are writing to impress upon you the urgency of the situation regarding the draft Order. It is our latest understanding from officials that the draft Order will commence debate at Westminster on 25 November with a view to its passing by Privy Council in early to mid December 2006. There is a real and obvious danger in allowing water charges to be remitted to the Programme for Government Committee while the draft Order is laid and passed in Parliament.

You will be aware from the compelling evidence we presented to you that passing this draft Order without scrutiny, debate and amendment holds great risks for consumers as well as for the NI Assembly who will be committed to this project for the next 20 years by this Government. The lack of confidence in the current water reform proposals will quickly become your problem and it will be too late to get things right.

We would like to thank you again for your diligence with regard to this issue and offer you best wishes for resolving this important issue which will have long term implications for every household and business here. We are, as always, available to provide further information and clarification to support you in your efforts to ensure that the NI Assembly takes control of this issue and is not committed to something which does not have the confidence of you or the public.

Yours faithfully

Eleanor Gill
On behalf of Consumer Council for Northern Ireland

Appendix 4

Written Evidence

Association of Northern Ireland Colleges

Second Paper to Assembly Sub-Group: October 2006

Introduction and Context

1. The Association of Northern Ireland Colleges (ANIC) is the membership body for all 16 colleges and institutes of further and higher education in Northern Ireland, providing the voice of further education to stakeholders as well as a range of services to member colleges. ANIC welcomes this opportunity to respond to the following section of the Economic Sub-Group's current terms of reference: ***To consider and report on the measures required to develop an integrated skills and education strategy capable of meeting the current and future needs of the economy and based on best practice elsewhere.***

2. Colleges in Northern Ireland are in the midst of a major change programme, directed by the Department for Employment and Learning (DEL), with the current 16 colleges merging into 6 larger, area-based colleges by August 2007. In addition to this structural change, colleges will have an enhanced economic focus as well as a key role in building social cohesion, which is detailed in DEL's Further Education Means Business strategic document.

3. Further Education (FE) is committed to serving the needs of people, communities and the economy in Northern Ireland through excellent, innovative and appropriate provision. To that extent, the sector has been generally supportive of the aspirations of the Department's strategy.

4. Currently the sector is responding to initial policy drafts developed by the Department. In our responses, the sector has stressed that the emerging policies must meet the needs of **learners** (e.g. 14-19; full-time and part-time; further education and higher education); **businesses** (for training, development and innovation); and **communities** – all of which are in need of ongoing, expert and focused support. The Further Education sector can play an important role in developing an integrated skills and education strategy capable of meeting the current and future needs of the economy and based on best practice elsewhere.

5. However, at the outset of this submission to the Economic Sub-Group, we feel we must stress the FE Sector's concerns that the content and interaction of the currently expressed policy strands may not facilitate fully the delivery of the sizeable potential benefits for Northern Ireland from a suitably structured, resourced and focussed Further Education sector.

Current and future needs of the Northern Ireland economy

6. ANIC supports the view that the Northern Ireland economy must develop strengths in added-value and innovative work, particularly in what is commonly termed "the knowledge economy". In order to achieve progress in this area, it is essential that Northern Ireland has a workforce with high level and appropriate skills; and has businesses which are innovative and enterprising. High level skills development is a key objective. However, the challenge

of upskilling individuals, including school-leavers, from a zero or low qualification base should not be under-estimated.

7. Northern Ireland's future is based on being a productive and sustainable region, capable of competing on a global stage. There is considerable potential for such success. However, there needs to be a greater degree of linkage between schools, colleges, universities and employers (both private and public sectors). Therefore an integrated education and skills agenda is essential.

Integrated Education and Skills

8. ANIC would point out that colleges have been providing an integrated suite of opportunities for learners over a long period of time. For example, the Further Education sector has always provided a balance of vocational and academic provision. Colleges have also increasingly engaged with businesses and their representative bodies and have long-standing partnerships with higher education. Finally, colleges have always provided a religiously and culturally integrated system of education and training.

9. Further Education is now firmly placed within many Government strategies – particularly the Department for Employment and Learning, but also the Department of Education and the Department of Enterprise Trade and Investment. This is appropriate because the expertise of colleges covers a wide range of areas, backed up by an excellent staff and a much-improved infrastructure. However, our sector remains unconvinced that Government Departments are operating in a sufficiently integrated manner which will unlock the potential of colleges and appropriately resource them for the benefit of people, communities and the economy across Northern Ireland.

10. Colleges are uniquely placed within the education, training and development system in Northern Ireland. They play key roles with the 14-19 age-range, apprenticeship and skills development, social cohesion, professional development, higher education and, increasingly, technology transfer and a full range of business support service. While these roles are essential, they need to be appropriately supported by Government. In particular, support is required with regard to resources and a co-ordinated and flexible policy framework which meets the current and future needs of people, communities and the economy.

Specific Education and Skills Issues

11. Skills flow into training and employment is an issue. In particular, the output of the schools' sector is very mixed. While we acknowledge the volume of high achievers at both GCSE and GCE A level, we have concerns that many young people entering college to begin professional and technical courses have remedial issues, particularly with literacy and numeracy. This deficit detracts from the delivery of new skills and knowledge in colleges. The Department of Education has a crucial role with schools to improve radically the levels of literacy and numeracy among its school leavers.

12. The emerging policy proposals from DEL must ensure that learners have, for example:

- The potential to experience and undertake the full range of subjects as per the recommendations of the Costello Report. That is, access to a mixture of academic and vocational subjects taught in an authentic manner by subject experts.
- Alternative pathways to higher education – including A level provision.
- Opportunities for second chance education to allow individuals to improve their skills. The proposed focus for colleges to specialise at Level 2 and upwards, as expressed in DEL's proposals, pose a dilemma for colleges. For example, what happens to learners at Level 1 and below? Will colleges become providers for more able learners? We believe that the aspiration for higher level skills development must be balanced with an appropriate emphasis on progression from low or no skills to preparation for higher skills.

13. The emerging policy proposals from DEL to support the economy must:

- Provide sufficient flexibility in course provision to address the needs of businesses
- Have access to revenue streams which are needed to support non-classroom based interventions to assist businesses – this could be facilitated by, for example, proper collaboration between Invest NI and DEL.
- Exploit fully information and learning technologies in a manner which will allow it to be funded.

14. The emerging policies must fully support the development of a sustainable economy which supports and encourages a stable society. In order to achieve this, ANIC strongly recommends that the Department's policies fully utilise the increasing amount of labour market information from its Skills Expert Group and the emerging Workforce Development Forums.

15. These data must be used to empower colleges to address skills gaps in emerging and niche areas so that Northern Ireland is a responsive European region which can attract inward investors. This strategy appears to have been successful in other settings including the Republic of Ireland and various regions of the USA, particularly North Carolina.

16. Within these regions, their further education sectors appear to have wider support across their national government departments, access to a range of different funding streams to address specific issues and greater flexibility to meet the needs of learners, communities and the economy.

Community Regeneration

17. Colleges have been at the heart of their communities for some 100 years. These communities have seen enormous changes – not just a result of a sustained period of conflict – but also as a result of economic changes.

18. Colleges have a strong social role and this is recognised within Further Education Means Business through its social cohesion statements. Colleges are concerned, however, that the balance between economic and social needs may be unduly skewed to the economy during the extensive period of change facing Northern Ireland. Key work within communities is required to increase capacity with regard to skills development.

19. We note recent statements by the leading business representative bodies which highlight the high proportion of economically inactive individuals in Northern Ireland. It is clear that suitable education and skills development is at the heart of addressing this issue and we believe that colleges must retain and, indeed, strengthen their role in this area.

20. Access to college services remain essential for many individuals. While there may be scope for colleges to work with other providers, Northern Ireland must ensure that access to courses which can re-engage individuals through personal development and skills enhancement is retained.

Funding

21. Government has placed colleges at the heart of economic development, innovation and education. This is most welcome as, for the first time in decades, colleges have greater clarity over their missions.

22. The sector has seen increases in revenue and capital funding over the last number of years, particularly since incorporation. However, this year (2006/2007) colleges have experienced a significant decline by some £11million in its revenue funding.

23. While we acknowledge that there has been pressure on the wider public sector, it is disappointing that, as we move through a tight transition process to 6 colleges, our budget has been reduced. This will not just impact on in-year service delivery, it will have a strong impact on the development of the new sector.

24. Government has enhanced our estate but it must continue its investment for services and staff. Evidence from Scotland, Republic of Ireland and the USA point to the value-for-money and effectiveness of the college sector. Northern Ireland must follow this best practice and develop a fit-for-purpose model for our people, our communities and our economy.

Summary

25. Many of the proposed changes to Further Education can support the development of an integrated skills and education strategy capable of meeting the current and future needs of the economy, based on best practice. However, colleges are concerned that the interaction of emerging policies against a backdrop of significantly reduced funding may foster a range of unintended consequences that may not fully meet the aspirations of a changing Northern Ireland and indeed government policy itself.

Frank Barry
University College Dublin

Third-Level Education, Foreign Direct Investment and Economic Boom in Ireland

Frank Barry
University College Dublin
October 2006

forthcoming in
International Journal of Technology Management (IJTM)

Special Issue on
Science and Technology Manpower Policy:
Issues of Current and Future Salience

Guest Editor: Professor Junmo Kim, Konkuk University, Korea

Abstract
Ireland's dramatic economic boom of the 1990s has been referred to as "the era of the Celtic Tiger". In a little over a decade, real national income per head jumped from 65 percent of the Western European average to above parity, unemployment tumbled from double to less than half the European Union average and numbers at work increased by over 50 percent. Much research has been carried out on the impact of each of the separate elements agreed to have been important in stimulating or sustaining the boom. The present paper focuses on one key under-researched synergy – the nexus between the country's industrial strategy, which focused on attracting foreign direct investment in certain high-tech sectors, and the orientation of the third-level educational system that had been developed in Ireland over recent decades.

Keywords: Science and Technology Manpower Policy, Education, Foreign Direct Investment, Ireland, Celtic Tiger.

Biographical Note: Frank Barry is Professor of Economics at University College Dublin. His research interests are in foreign direct investment, economic geography, economic development and the Irish economy. His work has appeared in the Economic Journal, the Journal of International Economics, the Scandinavian Journal of Economics, the Journal of Macroeconomics and in numerous other publications. He edited the 1999 book Understanding Ireland's Economic Growth, published by Macmillan Press, and co-authored – with Giorgio Barba Navaretti, Tony Venables and others – Multinational Firms in the World Economy (Princeton University Press, 2004).

Author: Frank Barry, Department of Economics, University College Dublin, Belfield, Dublin 4, Ireland. Tel: (353-1) 716-8239; Frank.Barry@ucd.ie; Fax: (353-1) 283-0068

This paper has benefited from the insights and helpful comments of John Bradley, Pat Clancy, John FitzGerald, Tom Garvin, Philip O'Connell and Tony White.

Introduction

The dramatic economic boom that Ireland experienced over the course of the 1990s has attracted worldwide attention. Having achieved little or no convergence on Western European living standards over the previous thirty years, Irish real national income per head jumped from 65 percent of the EU15 average at the beginning of the 1990s to above parity by the beginning of the next decade.[1] Unemployment tumbled from a high of 17 percent in the late 1980s – a level double the EU average – to a historically low 4 percent – half the EU average – by the end of the 1990s. Substantial budget deficits were transformed into surpluses, the government debt-to-GDP ratio was slashed, and numbers at work increased by an astonishing 50 percent.

The underlying causes of the economic boom, which has come to be referred to as the Celtic Tiger era, have been well researched; see for example Honohan and Walsh (2000) and Barry (1999, 2000). These papers identify a series of beneficial shocks – policy-induced and otherwise – to which the economy was subjected in the late 1980s and which created a virtuous circle of economic progress.

The beneficial shocks included a change in fiscal strategy in 1987. Up to that point, successive governments had struggled to overcome long-running budgetary and debt problems by continuous tax increases. A switch to expenditure reduction policies coincided with the development of a corporatist 'social partnership model' of wage determination. The expenditure reductions made credible the offer of future tax reductions in exchange for wage moderation and industrial peace, both of which bolstered competitiveness. The doubling of the EU Structural Funds in 1989 in turn made it possible to implement the badly-needed infrastructural projects that had been put on hold as part of the change in fiscal strategy.

Airline deregulation, in 1986, facilitated a more than doubling of tourist numbers over the following decade, commercialisation of the telecommunications system made it possible to attract newly offshoring IT-enabled services sectors, while the lead-up to the Single Market saw a massive increase in FDI flows both into and within Europe – of which Ireland captured a sharply increased share. These beneficial shocks all occurred against a backdrop of EU membership, a long-standing commitment to outward orientation, a low corporation tax regime, and a rapidly expanding educational system.

The present paper explores one heretofore under-researched element to the story of the Irish boom. This is the nexus connecting the rapid expansion in educational throughput with the long-established national strategy of seeking to attract foreign direct investment inflows in certain key high-tech sectors.[2]

---

[1] The term EU15 refers to the 15 Western European countries that made up the EU prior to the enlargement of May 2004. This enlargement reduced EU average income per head substantially.

[2] Ferreira and Vanhoudt (2002) also conclude that "higher education, especially the vocational/technical slant of educational provision, and the sector composition of FDI in favour of high-tech industries, were self-reinforcing factors" behind the boom. Wickham and Boucher (2004) argue that the key feature of the Irish education system – in comparison to those of the Asian Tigers and the rest of the OECD – has been its inexpensive 'volume production of technical graduates', undertaken without incurring the 'costs' of tackling educational disadvantage or developing a research-based innovation system.

The paper is structured as follows. The next section outlines Ireland's success in attracting FDI and details the changing nature of the foreign-owned sectors attracted to Ireland over the decades. Section 3 analyses the reasons for Ireland's success in the FDI stakes. Successive surveys of foreign-owned firms reveal that two of the important determinants of their decision to locate in Ireland are the availability of skilled labour and the specific skills of the workforce. Section 4, which comprises the main part of the paper, then looks at Irish educational policy and the development of the country's tertiary education system over recent decades in an attempt to understand how the synergistic relationship with industrial strategy emerged and strengthened. Section 5 presents some concluding comments, while a brief appendix offers a formal model of how educational policy can influence economic development even in an economy with a labour market as open to international migration flows as Ireland's is.

2. Foreign-Owned Industry in Ireland

Table 1 presents two measures of Ireland's success in attracting FDI. The column on the left shows the share of foreign-owned firms in manufacturing employment, while that on the right shows the inward FDI stock per capita. In both cases Ireland's FDI-intensity relative to the average Western European EU country is readily apparent.

Table 1:
Share of foreign affiliates in manufacturing employment, and inward FDI stock

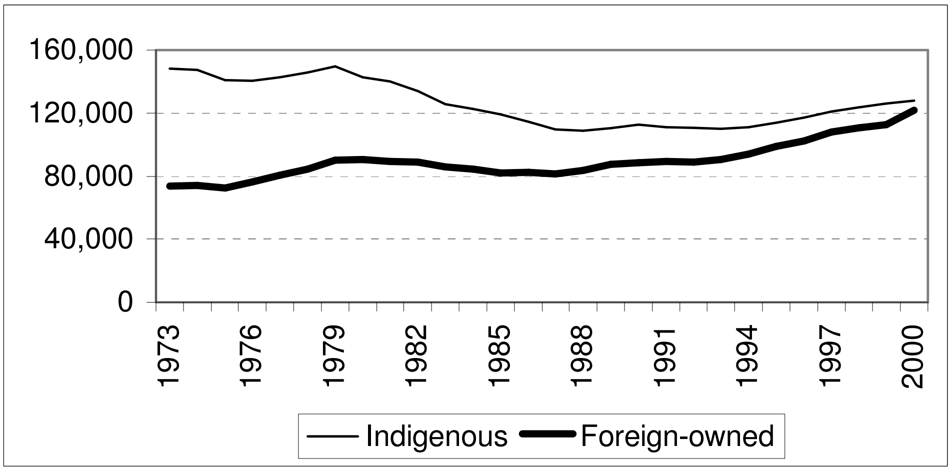
	Share of foreign affiliates in manufacturing employment (1998)	FDI inward stock (USD) per head of population (2000)
Ireland	48	37740
EU15	19	6032

Notes: share of affiliates in manufacturing employment comes from OECD (2001) Science, Technology and Industry Scoreboard; (EU15 here refers to the average of the 11 other member states for which the table provides data). FDI Inward Stock data come from the UNCTAD (2004) World Investment Report.

The growing importance of foreign-owned industry in Irish manufacturing employment is illustrated in Figure 1, while Table 2 charts the changing sectoral pattern of this employment over the period 1975 to 2000.[3]

[3] We use employment rather than output data throughout because transfer pricing activities associated with Ireland's low corporation tax regime are thought to distort the output and trade data pertaining to the country.

Figure 1: Employment in indigenous and foreign-owned manufacturing firms, 1973-2000



Source: Annual reports of the Irish state agency Forfás.

Large declines in the relative attractiveness of traditional sectors such as Food, Drink and Tobacco, and Textiles, Clothing and Footwear are apparent in Table 2. Having comprised 43 percent of foreign-sector employment in 1975, the share of these sectors had declined to 14 percent by the year 2000. The major expansions were seen in the Office and Data Processing Equipment, Pharmaceuticals and Medical Instruments sectors. Between 1975 and 2000 the share of this group of sectors in foreign manufacturing employment grew from 10 percent to 41 percent.

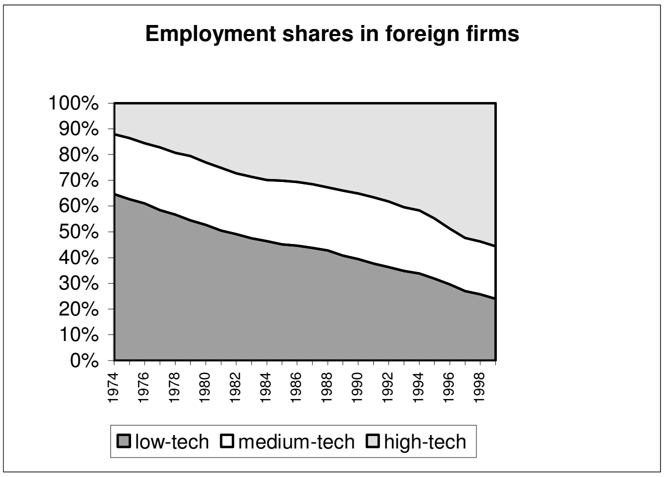
Table 2: Sectoral allocation of employment in foreign-owned firms in Ireland

	1975	**1980**	**1985**	**1990**	**1995**	**2000**
Food, Beverages and Tobacco	26	20	19	15	13	11
Textiles, Clothing and Footwear	17	16	14	13	9	3
Wood, paper, print etc.	4	3	3	3	3	2
Pharmaceuticals	4	4	5	7	9	11
Chemicals (excl Pharma)	6	7	7	6	6	5
Rubber, Plastics, Non-Metallic Minerals	8	9	8	7	6	5
Basic and Fabricated Metals	9	7	5	5	5	4
Machinery and Equipment nec	5	6	7	6	5	5
Office and Data Processing Equipment	2	4	6	7	11	19
Electrical Machinery and Apparatus	3	5	6	7	7	8
Radio, TV and Telecomm Equipment	1	3	4	5	7	7
Medical Instruments	4	7	8	8	9	11
Transport Equipment	10	8	6	9	8	7
Manufacturing nec	2	2	1	2	2	1
Total	100	100	100	100	100	100

Source: unpublished data from state agency Forfás.

These expanding sectors are all classified as high-tech by the OECD. Employment developments in foreign industry as classified by technology level are depicted in Figure 2.[4]

Figure 2: Technology mix of foreign firms.



Data on service sectors, unsurprisingly, are not as comprehensive as those available for manufacturing. Ireland is known, however, to have become a leading European location for offshored services in three separate areas: computer software and services, international financial services and other business process outsourcing (BPO) activities such as call centres and shared services.

Foreign firms in computer software and services currently employ about 21,000 workers (roughly the same number as are employed by foreign firms in Office and Data Processing Equipment), international financial services about 10,000 (around the same number as in foreign-owned Pharmaceuticals) and other BPO activities about 14,000 (close to the number in foreign-owned Medical Instruments). All of these offshored service sectors emerged in Ireland only over the course of the 1990s.

Most of these foreign-dominated sectors, furthermore, provide relatively more employment in Ireland than they do elsewhere in Europe. Computer equipment for example is ten times more important in Ireland than it is for the EU15, electronic components four times more important and software 1.3 times more important; Barry and Curran (2004).

Now consider the educational attainment levels of employees in these foreign-dominated sectors. The industries with the highest shares of their workforce possessing third-level educational qualifications are Chemicals, Rubber and Plastics; Beverages and Tobacco; and Metals, Machinery and Engineering – in each of which foreign-owned firms comprise around 70 percent of total employment.

[4] By contrast, sectoral allocations of domestic-firm employment by technology level have hardly changed at all. The allocation to low-tech sectors remains at over 70 percent.

Table 3: Proportion of workforce in each sector with third-level (degree and non-degree) educational qualifications:

	1966	1971	1981	1986	1991	1996	2001
Manufacturing Industries	3.1	3.4	7.0	9.1	14.0	21.7	28.9
Food	4.1	4.5	6.4	8.5	11.6	17.0	21.6
Beverages and Tobacco	3.7	-	6.6	8.4	18.4	28.3	38.5
Textiles, clothing, footwear and leather	1.2	1.5	3.5	4.4	6.5	9.8	15.0
Wood and wood products	1.2	1.2	2.8	3.6	5.2	8.8	14.3
Paper, paper products, printing and publishing	3.7	4.2	7.6	9.0	15.1	23.5	32.2
Chemical, rubber and plastic products	8.9	7.3	11.7	14.4	25.0	29.8	38.8
Glass, pottery and cement	2.8	3.1	5.1	6.6	9.8	15.3	17.6
Metals, machinery and engineering	3.4	3.6	9.8	12.4	18.3	27.4	33.6
Other Manufacturing (incl transport equip.)	3.9	4.1	6.6	8.1	14.6	23.3	18.8

Source: Data calculated from the Census of Population and kindly provided by researchers at the Economic and Social Research Institute, Dublin.

As Barrett, FitzGerald and Nolan (2002) point out, the high-tech manufacturing sectors (engineering and chemicals), driven by the inflow of foreign firms, now employ nine percent of those with third-level qualifications, up from a figure of only three percent in 1966. Most of those with such qualifications continue to be employed in financial and professional services, however, though some segments of these service sectors too have been driven primarily by offshoring FDI.

3. Reasons for Ireland's Success in Attracting FDI

Ireland's success in attracting FDI can be ascribed to a combination of factors, which will be discussed individually below. These include:

- EU membership, a Western European seaboard location and an English-speaking environment (characteristics which the country shares with the UK of course)
- a low corporation tax rate
- the skills and experience of the country's Industrial Development Agency (IDA)
- the quality of the telecommunications infrastructure, and
- an educational system that is tightly integrated with the country's FDI-oriented development strategy.

The importance of the first set of factors is attested to by the fact that the UK and Ireland are particularly attractive destinations for US foreign investments, with the highest US FDI stocks per employee in the EU.

Numerous studies, including Gropp and Kostial (2000), Altshuler et al. (2001) and Slaughter (2003), have verified the importance of the corporation tax regime for FDI inflows. Ireland, as is well known, has the lowest rate of corporation tax in the EU15 and usually shows up as having the lowest effective rate as well, apart from Luxembourg whose tax incentives are targeted primarily towards the financial sector.

The skills and experience of Ireland's investment promotion bodies are also important. The Industrial Development Agency is recognised internationally as an example of best practice in the field.[5] It has also used its bureaucratic clout to press for continuous improvements in education and infrastructure.

Its impact on the structure of the Irish education system will be discussed in the next section of the paper. In terms of its impact on infrastructure, MacSharry and White (2000) – the former an erstwhile Finance Minister in the Irish government and the latter a long-term Managing Director of the IDA – describe its role in wresting the state telephone system from the hands of the moribund Department of Posts and Telegraphs in the 1970s. The service was commercialised and the most advanced European digital-based network outside of France was brought into operation shortly thereafter. This allowed Ireland capture a range of newly offshoring IT-enabled services sectors in which first-class international telecommunications were a key factor.

Having already established itself as a major European location for export-platform activity, Ireland may have been in a unique position to benefit from the Single European Market initiative. MacSharry and White (2000) describe how several larger EU countries, in the pre-Single Market era, "had suggested to potential investors that publicly funded purchases of their products might be blacklisted if the new investment was located in Ireland" (rather than in the countries making the threatening noises). The restrictive public procurement policies that underlay these threats were outlawed under the Single Market legislation. This, along with the agglomeration and demonstration effects identified by Barry, Gorg and Strobl (2003), would appear to explain the sharp increase in Ireland's share of FDI flows into and within Europe when the Single Market came into being; Barry (2004).

As to the importance of education and skills in determining the European location of multinational companies, and as to their adequacy in Ireland, surveys of the management of MNCs invariably rank both highly. Gunnigle and McGuire (2001) for example, in a survey of executives of 10 major US MNCs, find that these factors rank second in importance after the corporation tax regime in drawing these firms to Ireland.

The International Institute for Management Development (2002) in Switzerland surveys executives across a range of countries and asks them to rank the performance of countries relative to each other. Here executives rank Ireland number 2 (after

[5] See, for example, Loewendahl (2001).

Finland) out of a total of 49 countries in response to the statement "the educational system meets the needs of a competitive economy", while the country is ranked number 3 (after Finland and Canada) out of the same 49 countries in terms of a positive response to the proposition that "university education meets the needs of a competitive economy".

This is consistent with the evidence showing that Ireland has one of the highest proportions of population aged 25 to 34 in the OECD with a third-level educational qualification (Figure 3) and that a very high proportion of these have science and engineering degrees (Figure 4).

Figure 3:

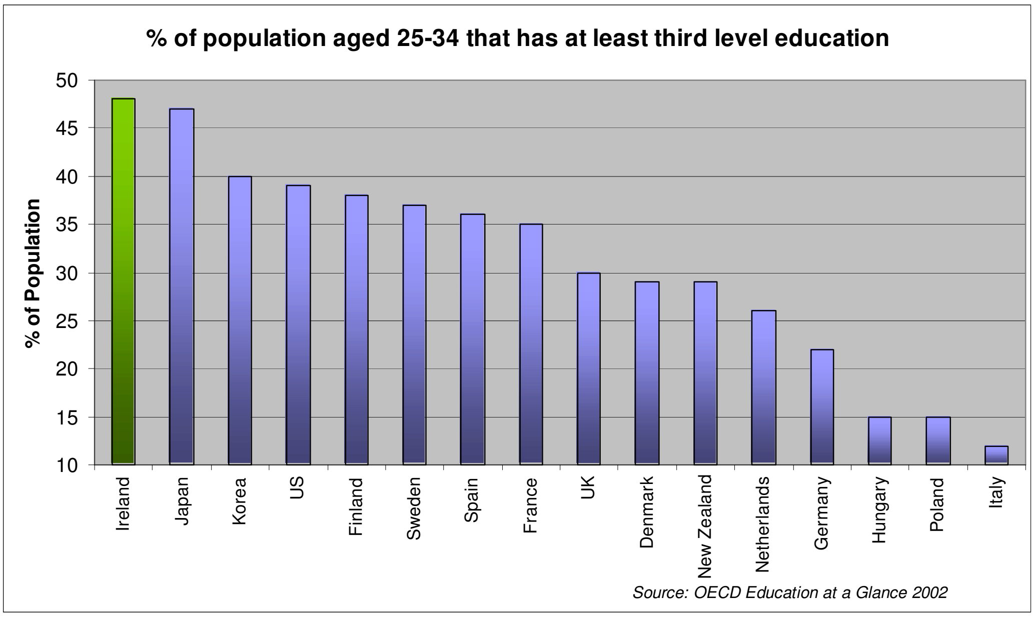
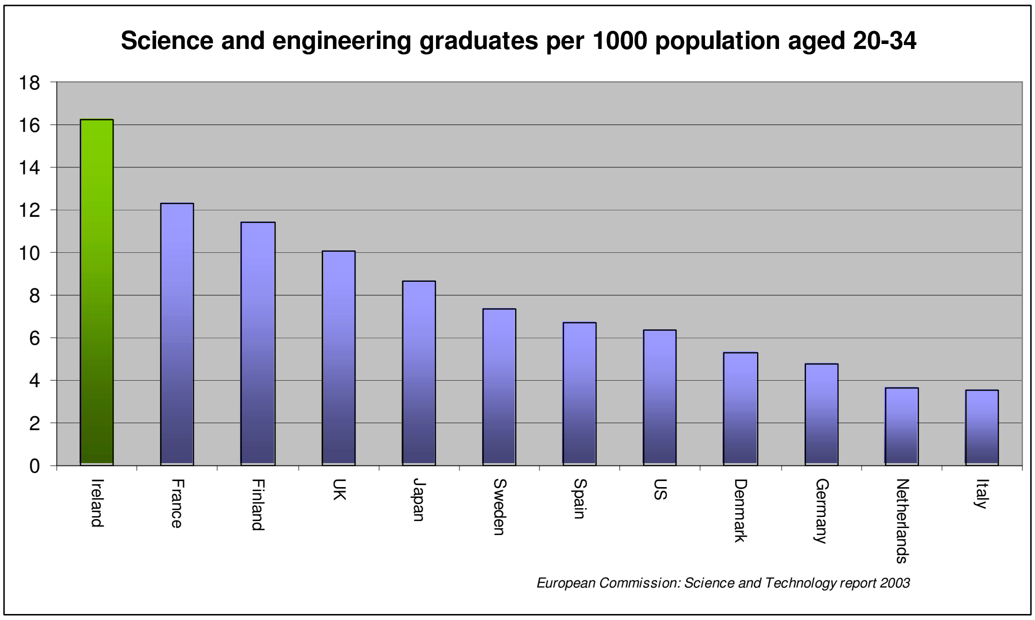


Figure 4:



The next section of the paper analyses how the Irish educational system has evolved to this position.

4. Irish Educational Policy and Industrial Strategy

Access to secondary (and hence also to third-level) education was broadened rather later in Ireland than in most of the rest of Western Europe. This is reflected in the OECD data on educational attainment by age cohort shown in Table 4.[6] These data, expressed as a percentage of the OECD country mean, also illustrate clearly the convergence in educational throughput that Ireland has achieved over time.

Table 4: Irish educational attainment as a percentage of the OECD country mean

Age Group	Population that has attained at least upper secondary	Population that has attained at least tertiary level B	Population that has attained at least tertiary level A
55-64	69	79	56
45-54	71	80	54
35-44	85	96	73

Source: OECD (2001)
Note: Tertiary B refers to practically-oriented and occupation-specific tertiary programmes of at least 2 years full-time-equivalent duration, while tertiary A refers to university level programmes.

The current situation is depicted in Table 5, which shows that Ireland has now surpassed the OECD country mean in tertiary and post-secondary education, and has just matched the mean in terms of those with university qualifications.

[6] The politics underlying the delay in expanding educational access are analysed by Garvin (2004).

Table 5: Irish educational attainment, younger cohort.

	Percentage of cohort aged 25-34 that has attained at least upper secondary	Percentage of cohort aged 25-34 that has attained tertiary level B	Percentage of cohort aged 25-34 that has attained tertiary level A and above	Post-secondary non-tertiary graduation rates
Ireland	67	13	16	25.8
OECD country mean	72	9	16	8.5

Source: OECD (2001)
Note: Tertiary B and A as defined above. The post-secondary graduation rate refers to the ratio of post-secondary graduates to total population at the typical age of graduation. In Ireland the whole cohort included here are categorised as ISCED4C, i.e. in possession of a qualification which prepares participants for direct entry into specific occupations. This will include part of the Institute of Technology cohort as well as some PLC (Post Leaving Certificate) courses.

This extra Irish throughput in tertiary education, furthermore, is largely concentrated in the scientific area. Scientific degrees and diplomas are in strong demand within foreign-owned industry in Ireland and, to this extent, Ireland's overall industrial strategy – which has been targeted at attracting MNCs in certain high-tech sectors – can be seen to have influenced the setting of development priorities within the human capital domain.

Table 5 shows Ireland to have an unusually large cohort endowed with non-university 3rd-level educational qualifications, which are in technical and vocational fields. The major part of the present story is concerned then with how this system evolved and with the impact it has had on Ireland's ability to attract foreign direct investment.

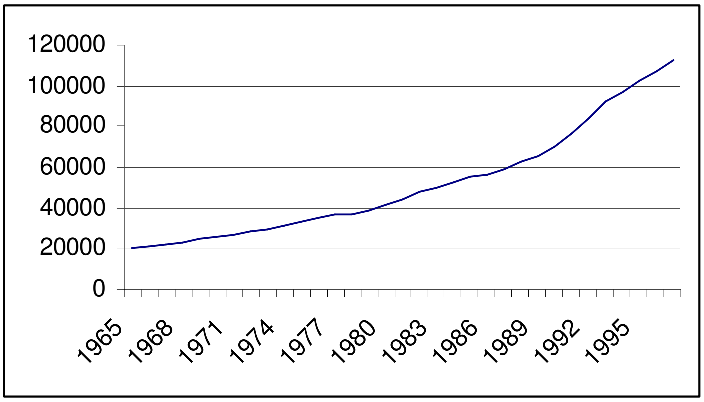
Analyses of Ireland's educational transformation accord a hugely influential role to the 1965 report *Investment in Education,* which was undertaken with the assistance of the OECD.[7] The study was initiated because it was recognised that Ireland's changing occupational structure would place significant demands on systems of education and training. It was informed throughout by the perspective that education was a means by which society invested in its own future. The report's two central propositions were that a non-meritocratic education system was wasteful of natural talent, and that investment in the education of that talent had contributed significantly to European postwar economic growth. *Investment in Education* was scathing in its assessment of the Irish education system of the time. It reported that over half of Irish children left school at or before the age of thirteen, a finding that generated newspaper headlines and that presaged the introduction of 'free' second-level education and free access to special transport networks for all second-level school pupils in 1967. Though educational participation in Ireland had been expanding in previous decades, the introduction of these and other reforms – the abolition of the primary-school certificate in recognition that it was no longer an appropriate standard for admission

[7] An important feature of the report was that, in the words of Logan (1999), "technocratic expertise was being given unprecedented attention and might now be heard alongside the political party and denominational interests which had previously dominated ministerial councils".

to apprenticeship, and slightly later increases in the compulsory-attendance age – still came a decade or more after other Northern European countries had moved in this direction.

In 1965 only 20 percent of the age cohort remained through to the final stages of secondary school. Thirty years later the numbers at school had trebled, with 80 percent completing the full cycle. Numbers at third-level, meanwhile, had increased even more substantially – by a factor of six – as illustrated in Figure 5.

Figure 5: Numbers of full-time students in third-level education



Source: White (2001), Appendix 1.

Over the period from 1965, as the third-level system expanded, the composition of the institutions comprising the system also changed. Seventy five percent of full-time third-level students in the mid-1960s were enrolled in universities, about 20 percent were in teacher training colleges and other specialist institutions, and only 5 percent were in vocational and technological education; White (2001, page 79, 90). By the late 1990s, universities accounted for a much lower 54 percent share, while that of the broad vocational and technological sector had risen to 37 percent. As will be documented below, the subject areas in which third-level graduates received their qualifications had also shifted towards a more vocational and technological orientation.

Table 6: Percentages enrolled in various elements of the tertiary education sector

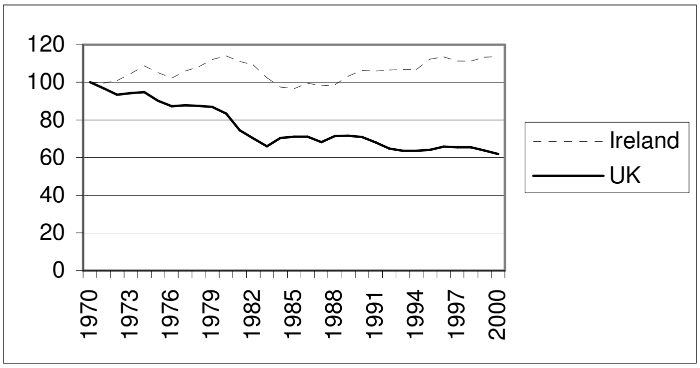
	1965/66	1970/71	1980/81	1990/91	1997/98
Universities	75	75	55	54	54
Vocational/Technological/ Regional Technical Colleges	5	9	26	39	37
Other	21	16	19	7	9

Source: White (2001, Appendix 1).
Note: The two National Institutes of Higher Education were awarded university status in 1989/90, and shifted from the vocational/technological category at that time.

Educationalists draw a distinction between Northern and Southern European models of higher education, with the former, because of the earlier industrialisation of these economies, retaining a strong focus on the need for technical as well as traditional university education. Though a late industrialising economy, Ireland developed elements of the former 'binary-type' system when throughput began to expand in the wake of taxpayer funding of secondary education. Perhaps surprisingly, the development of the binary model in Ireland appears to have drawn more from the early advice of the OECD and from Ireland's access to the EU Social Fund than from the experience of the UK, the country's nearest neighbour.

The UK's early industrialisation had ensured the evolution of a well-developed system to provide an intermediate layer of technicians. It was recognised in Ireland that the education system would need to provide this intermediate layer from scratch if human resources were to be available to sustain the industrial expansion, depicted in Figure 6, that followed on from Ireland's relatively late trade liberalisation.

Figure 6: Irish and UK Manufacturing Employment, 1970=100.



Source: OECD

The main components of the technical-education system developed in Ireland over the course of the 1970s were the Regional Technical Colleges (RTC), for which there was no UK model. As initially proposed, these were not envisaged primarily as institutions concerned with third-level education. Their functions were to provide (i) senior-cycle post-primary courses leading to the Technical Leaving Certificate (a variant of the national award made to second-cycle graduates), (ii) junior and senior Trade Certificate courses for apprentices on day or block release from work, (iii) courses for technician or in some cases professional qualifications at various levels, and (iv) adult education and retraining courses; White (2001). Course programmes were to be of shorter duration than those at universities, there was a limited range of subjects on offer – mostly in the fields of engineering and business studies, and curricula had a practical orientation designed to be responsive to the needs of local industry and business.

As the report of the Steering Committee on Technical Education (1967) put it:
"The main long-term function of the Colleges will be to educate for trade and industry over a broad spectrum of occupations ranging from craft to professional level, notably in engineering and science, but also in commercial, linguistic and other specialities. They will however be more immediately concerned with providing courses aimed at

filling gaps in the industrial manpower structure, particularly in the technician area"; Clancy (1993, page 125).

Five Regional Technical Colleges were established around the country in 1970 and a further four were established between 1971 and 1977. The colleges quickly shed almost all their second-level teaching however, to concentrate on the provision of third-level courses in engineering, construction and business studies, applied science and art and design.[8] Their course offerings remain distinctive however in that they are mainly short-cycle and sub-degree level. The majority of courses are of two-year duration, leading to a National Certificate award. There are, in addition, a small number of one year certificate courses, a significant number of three-year courses leading to a National Diploma, and a limited number of four-year degree-level courses.[9]

Besides the RTCs, third-level vocational education was also provided through five older Dublin colleges: a college of commerce, a college of catering, a college of marketing and design, and two colleges of technology. These colleges, which would eventually be amalgamated to form the Dublin Institute of Technology in 1978, also saw their enrolments increase throughout the decade.[10]

This expansion in this system was financed with the assistance of European regional aid funds, which at the time came primarily through the European Social Fund (ESF). Since Ireland, at the time of EU accession in 1973, was by far the poorest of the EU member states, it received a disproportionate share of total Social Fund allocations, of which the Industrial Training Authority was the main beneficiary. In 1975 the EEC Council decided to make a special Social Fund provision to facilitate the employment and geographical and professional mobility of young people under 25 years of age. One of the applications, from the Irish Department of Education, covered the training of young persons in middle-level technician skills in the newly established RTCs.

The introduction of Social Fund aid to the RTCs was gradual and low-key and entailed an element of subterfuge on the part of the Irish authorities since EU regulations at the time permitted funding of training only, and not of education. In 1979 there were 2000 students obtaining such assistance, by 1982 numbers had grown by a further 50 percent, and by 1986 almost 90 percent of all new entrants to full-time courses at the RTCs – i.e. about 20 percent of those entering third-level education in Ireland – were in receipt of ESF grants. The benefits of this form of education and

---

[8] This was facilitated by concurrent reforms undertaken at second level to blunt the sharp distinction between secondary and vocational schools. The latter, which took about 40 percent of the second level intake in 1963, concentrated on junior-cycle courses and, even at senior cycle, did not provide the range of subjects that would have allowed for university matriculation. In 1967, however, Leaving Certificate courses were introduced to vocational schools, facilitating access to tertiary level, while comprehensive and, later, community schools began to be developed from 1966 with curricula that spanned the academic and the vocational; Logan (1999).

[9] The proportion of RTC (now known as Institutes of Technology) students graduating with degree-level or higher awards has increased steadily over time.

[10] In 1972, the National Council for Educational Awards was instituted to provide academic validation and act as the examining and awards body for the non-university tertiary sector.

training, furthermore, show up as significant in terms of both employment prospects and earnings ability.[11]

From having had a tiny short-cycle third-level sector before 1970, by 1981 Ireland had internationally, after the Netherlands, the highest proportion of third-level students taking sub-degree courses. According to White (2001) "the quiet introduction of ESF funding in 1975 had played a major part in this transformation".

At the same time, it came to be felt that the content of technological education needed to be further upgraded and that technological and higher technician roles needed to become 'status carrying in their own right'; Clancy (1993). The universities were not viewed as best equipped to provide this form of education. White (2001) lists three grounds for this opinion. Firstly, it was held that universities were concerned with fundamental and theoretical studies while technology was concerned with the practical and applied. Secondly, there was, naturally, an academic bias within the university system. Finally, the concept of autonomy was central to the functioning of the universities, while government felt the need for institutions more amenable to its control and able to respond more rapidly to changing technological and manpower needs. Accordingly, two National Institutes of Higher Education, loosely based on the UK system of polytechnics, were set up; the first, at Limerick, in 1972 and the second, in Dublin, in 1980.

By that year, after just one decade, the new system was almost entirely in place. A characteristic of this new tertiary sector was that socio-economic disparities were less marked than within the traditional system. Clancy (1993) provides data on the extent to which various social groups are proportionately represented or under or over-represented within the system. The contribution of the new tertiary element can be seen by comparing participation ratios among university entrants relative to all third-level entrants; Table 7.

Table 7: Participation ratios in third-level education by social class

Socio-economic group	**University Entrants**		**All third-level entrants**
	1963	1986	1986
Farmers	0.79	1.13	1.45
Professional/managerial/ inter non-manual	3.21	2.27	1.82
Other non-manual	0.3	0.27	0.5
Skilled manual	0.4	0.31	0.51
Semi-skilled/unskilled manual	0.08	0.19	0.3

[11] Denny et al. (2000) show that for persons under 37 years of age in 1994, a 3rd-level (sub-degree) diploma increased men's hourly earnings by 15 percent and women's by 7 percent, as against those with just Leaving Certificate (secondary school) qualifications. They also show that the probability of being in employment is significantly enhanced by possession of a Middle Level Technician/Diploma level qualification.

The table indicates that the professional and managerial class is over-represented throughout. Amongst all third-level entrants in 1986 for example, this group had 82 percent more places than would be justified on the basis of its proportionate share of the population. While students of semi-skilled and unskilled manual backgrounds are under-represented across all measures, their under-representation is seen to be less severe in the non-university than in the university tertiary sector.

It was noted earlier that the RTCs quickly shed virtually all of their secondary-level functions. A similar phenomenon – known as 'academic drift' – manifested itself within the new NIHEs. They rapidly began to operate primarily at degree level. Indeed when the second National Institute opened in 1980 it offered no sub-degree level courses. The same pattern had been recognised within the British polytechnics. Indeed Neave (1982) concluded that by the early 1980s, in terms of the structure of courses, length of study and distribution of the fields of study, the polytechnics has become universities in all but name. They were finally granted university status in 1992, signalling the end of the binary system in the UK.[12] The granting of university status to the National Institutes of Higher Education in Ireland in 1990 did not signal the end of the binary system in that country however, since there remained a range of publicly-funded institutions of higher learning that continued to be more responsive and amenable to government policy objectives than the autonomous universities.[13]

Since the late 1970s, furthermore, the universities themselves – at the behest of the national development agency, the IDA – had begun to accept increased responsibility for ensuring that manpower needs were met. The Manpower Consultative Committee was established in 1978 to provide a forum for dialogue between the IDA and the education system. The state agency, concerned by the looming disparity between electronics graduate outflows and its own demand projections, convinced the government to fund a massive expansion in educational capacity in these areas.[14] The output of engineering graduates, as a result, increased by 40 percent between 1978 and 1983, while the output from computer science increased tenfold over the same short period. The IDA in turn was able to use the rapidity of this response – exemplified by the immediate introduction of a range of one-year conversion courses to furnish science graduates with electronics qualifications – as a further selling point to foreign investors; MacSharry and White (2000).

White (2001), in his history of the Irish 3rd level system, refers to this as the period when "the universities came in from the cold". By taking on board the need to bear manpower requirements in mind, they bridged the gap between the two strands of the binary system and ensured that the bulk of the Irish workforce on offer would have a broad educational background, though with a high degree of technical expertise, rather than a narrow vocational one.

---

[12] Australia had operated a binary system for twenty years before abandoning it in 1987; White (2001).

[13] Indeed Ó Buachalla (1992) suggests that the important distinction is not between universities and non-universities, but between autonomous and non-autonomous establishments.

[14] The Irish system offers a finite number of places in most third-level courses. These numbers are decided within the universities but are subject to government influence given that the latter provides the bulk of university funding. Ó Riain (2004) points out that this system gives the Irish state a much greater capacity to mould the labour market for specific economic sectors than is the case in many other countries.

The changes in chosen fields of study across the two elements of the binary system also in fact mirrored each other. Table 8 shows the expansion in business studies in the non-university sector between the 1970s and the 1990s, which came there at the expense of engineering, while Table 9 shows that business studies also expanded in the universities, along with science and information technology, though in this segment of the tertiary sector it came primarily at the expense of arts.

Table 8: Non-University Tertiary Awards by field of study

Year	Business Studies (%)	Engineering and Technology (%)	Humanities (%)	Science, Computing and Paramedical (%)	Total Graduating
1975	25	51	6	18	1035
1999	43	19	19	19	16,501

Source: National Council for Educational Awards, 25th Annual Report (1998/99)
Note: The NCEA has now been subsumed within the Higher Education and Training Awards Council (www.hetac.ie).

Table 9: University Enrolments by field of study.

Year	Arts	Business/ Commerce	Social Science	Law	Science, computing and IT	Engineering	Architecture	Medicine	Agriculture	Tot
1971	46.6	10.3	2.5	2.7	11.7	7.6	0.9	13.1	4.6	1
2003	37.0	15.3	1.4	2.7	19.5	7.7	0.4	13.3	2.8	6

Source: HEA Report on University Reorganisation (1972); HEA Annual Report 2002/3 (available at www.hea.ie)
Notes: 1971/72 refers to full-time students; 2003 refers to undergraduate enrolments. Arts includes education , European Studies and communications; Medicine includes nursing and dentistry; Agriculture includes veterinary medicine and food science.

Combining both elements of the tertiary system and using the data in Table 6, the proportion taking business studies is seen to have doubled to about 28 percent between the early 1970s and the new millennium while the proportion taking science and engineering remained stable at around 32 percent, giving Ireland – as illustrated earlier – one of the highest proportions in the world of the 24-34 age cohort with science and engineering qualifications.

Finally, Table 10 shows that the non-university sector caters disproportionately to manufacturing industry, that science and engineering graduates from both elements of the tertiary system tend to be employed disproportionately in the foreign-dominated segments of manufacturing industry, and that business studies graduates – particularly from the university element – tend to service the high-tech segment of market services in which Ireland has also proved successful in drawing in FDI.

Table 10: Sectoral distribution of recent university and non-university graduates.

	Share of jobs in the Irish economy	**University Sector**					**Non-University Sector**				
		All Faculties	Business	Humanities	Engineering	Science	All Faculties	Business	Humanities	Engineering	Science
Manufacturing	15.5	20.1	9.3	7.5	55.5	32.9	26.5	14.5	7	49.7	29.4
of which: Chemicals, rubber and plastics, healthcare products	2.1	5.1	1.6	1.6	7.1	16.2	4.4	1.5	0.3	2.5	15.1
of which: Engineering, electronics and metal industries	6	10.7	3.8	1.9	46	10.8	14.4	3.1	0.8	42.2	5.2
Insurance, Financial, Business and Computer Services	12.5	26	43.9	21.3	12.6	28.4	13.9	22.1	3.6	2.8	23.4

Sources: Higher Education Authority (2000) First Destination of Awards Recipients in Higher Education; Quarterly National Household Survey (2000, Q1); Census of Industrial Production (2000).
Note: Degree recipients from the non-university sector, comprising about 20 percent of that sector's output, are included in the data pertaining to the university sector.

Concluding Comments

The subject of this paper has been the nexus between Ireland's long-standing industrial strategy – which has focused on attracting foreign direct investment in certain high-tech sectors – and the orientation of the country's third-level system of education. It is clear that Ireland could not have upgraded into the high-tech sectors that it has been successful in attracting had it not been able to furnish the kinds of skilled workers that these sectors require. The paper has explored in turn the nature of the educational institutions that have provided these skills.

Science policy in Ireland until recently had been almost completely focussed on this issue of skilled labour supply. Convergence on average Western European living standards over recent years however has brought an increased emphasis on other elements of science, technology and innovation policy.

Part of this refocusing can be seen as a response to the growing phenomenon of *technology-sourcing* foreign direct investment (FDI), as detailed in UNCTAD (2005). While traditional FDI consisted of firms setting up overseas to exploit on a larger stage the advantages such as brand names and patents that they had already accumulated, technology-sourcing FDI sees firms seeking to access foreign technological assets and capture the externalities created by host-country technological clusters. Increasingly, multinational firms are setting up overseas R&D facilities where local conditions are such as to increase the likelihood of innovations emerging.

This likelihood depends on the local ‘innovation system’ – the process by which public and private-sector institutions, firms and national policies interact and coalesce to generate innovation. Recognition of the importance of developing an Irish national system of innovation was heralded by the release in 1996 of the first-ever Irish Government White Paper on Science, Technology and Innovation. Investment in these areas increased five-fold under the National Development Plan 2000-2006. Further developments saw the launch in 1998 of the Programme for Research in Third-Level Institutions (which established 24 research centres as well as major programmes in human genomics and computational physics), by the funding by Science Foundation Ireland of five joint partnerships between third level research institutions and industry, and by the introduction of a 20 percent tax credit for incremental R&D in the Finance Act of 2004.

Within ICT alone, the last two years have registered a number of significant developments under the new strategy. Bell Labs has announced its intention to set up a major R&D centre at Lucent Technologies’ Dublin facility, linked with the establishment of a collaborative academic centre at one of the city’s universities. Similarly, Hewlett-Packard announced the establishment of a world-class Technology Development Centre at its manufacturing facility outside Dublin, while its European Software Centre entered into collaboration with the National University of Ireland – Galway in establishing the Digital Enterprise Research Institute. Intel has established an innovation centre at its main site outside Dublin, has increasing its investment in its research centre near Limerick and has partnered three Irish universities in an academic Centre for Research on Adaptive Nanostructures and Nanodevices. IBM, over this same period, announced further significant investments in its Irish R&D software facility in Dublin, influenced, according to one of the directors of the company, by the availability of the necessary skills, the strong support of the Industrial Development Agency and the growing emphasis on scientific research by Science Foundation Ireland.

While the Irish tertiary system appears to be developing in an appropriate direction, problems remain within the second-level education system, as evidenced by the fact that Ireland still lags behind the OECD in this segment (Table 5 above). Nickell and Bell (1996) – drawing on the work of Sig Prais of the National Institute of Economic and Social Research in the UK – argue that the most important factor determining the contribution of the education system to economic success within developed countries is the strength of the emphasis it places on sustaining a high level of performance on the part of the bottom half of the ability range.

In this regard the Irish pre-tertiary system is clearly lacking. The 1995 OECD Economic Survey of Ireland notes that "the performance of Irish schools is much more uneven than in other countries", and suggests that "the variability of school performance may be one explanation for the large differences in student performance according to the social status of their parents".

A comprehensive analysis of the performance of the second-level system in Ireland is provided by Hannan et al. (1996). Amongst their findings are that, even controlling for pupils' individual ability and individual family background, having a high proportions of peers from an unskilled manual background leads to significantly poorer examination results. Thus the fact that working class boys are over-represented in the vocational schools system – which contains substantially greater proportions of children with numeracy and literacy problems – while middle class children are over represented in secondary schools, is of considerable practical significance.

They comment also on the process of transition from school to work, training and further education, pointing out that this has become increasingly dependent on academic grades, to the neglect of alternative certification arrangements or appropriate subject specialisations. This further acts to the detriment of those with vocational or practical rather than academic skills.

Nor does the Irish training system appear to be successful in overcoming the obstacles facing early school leavers. Thus O'Connell (2002) finds that, amongst graduates of Irish National Training Authority (FÁS) courses, those with educational qualifications find jobs more easily, and at higher rates of pay, than do those without second-level state examination qualifications.

It is to be hoped that these continuing deficiencies in the second-level system will now be tackled with the vigour with which Ireland's tertiary-level problems have been addressed.

References

Altshuler, R., H. Grubert, and T. S. Newlon. (2001) “Has US Investment Abroad become More Sensitive to Tax Rates?”, in J.R. Hines Jr. (ed.), *International Taxation and Multinational Activity*, Chicago: University of Chicago Press.

Barrett, A., J. FitzGerald and B. Nolan (2002) “Earnings inequality, returns to education and immigration into Ireland”, *Labour Economics*, 9, 5, 665-680.

Barrett, A., and F. Trace (1998) Who is Coming Back? The Educational Profile of Returning Migrants in the 1990s. *Irish Banking Review*, Summer, 38-51.

Barry, F. (1999, ed.) *Understanding Ireland’s Economic Growth*, London: Macmillan Press and New York: St. Martin’s Press.

Barry, F. (2000) "Convergence is not Automatic: Lessons from Ireland for Central and Eastern Europe", *World Economy*, 23, 10, 1379-1394, 2000.

Barry, F. (2002) “FDI, Infrastructure and the Welfare Effects of Labour Migration”, *Manchester School*, 70, 3, 364-379.

Barry, F. (2004) “Export Platform FDI: the Irish Experience”, *EIB Papers*, 9, 2, 8-37. Luxembourg: European Investment Bank.

Barry, F., and D. Curran (2004) “Enlargement and the European Geography of the Information Technology Sector”, *World Economy*, 27, 6, 901-922.

Barry, F., H. Görg and E. Strobl (2003) “Foreign Direct Investment, Agglomerations and Demonstration Effects: An Empirical Investigation”, *Weltwirtschaftliches Archiv*, 139, 4, 583-600.

Clancy, P. (1993) Goal Enlargement and Differentiation: The evolution of the Binary Higher Education System in Ireland, in C. Gellert (ed.) *Higher Education in Europe*, London and Philadelphia: Jessica Kingsley.

Denny, K., C. Harmon and P. O’Connell (2000) *Investing in People*, Policy Research Series No. 38, Dublin: Economic and Social Research Institute.

Fahey, T., J. FitzGerald and B. Maitre (1998) “The Economic and Social Implications of Population Change”, *Journal of the Statistical and Social Inquiry Society of Ireland*, xxvii, v, 185-222.

Ferreira, L., and P. Vanhoudt (2004) Catching the Celtic Tiger by Its Tail, *European Journal of Education*, Volume 39 Issue 2

Garvin, T. (2004) *Preventing the Future: Why was Ireland so poor for so long?*, Dublin: Gill and Macmillan.

Gropp, R. and Kostial, K. (2000). The disappearing tax base: is foreign direct investment eroding corporate income taxes?, European Central Bank Working Paper No. 31.

Gunnigle, P., and D. McGuire (2001) "Why Ireland? A Qualitative Review of the Factors Influencing the Location of US Multinationals in Ireland with Particular Reference to the Impact of Labour Issues," *Economic and Social Review*, 32, 1, 43-67.

Hannan, D., E. Smyth, J. McCullagh, R. O'Leary, D. McMahon (1996) *Coeducation and Gender Equality: Exam Performance, Stress and Personal Development*, Dublin: Oak Tree Press in association with the Economic and Social Research Institute.

Honohan, P., and Walsh, B. (2002). "Catching up with the Leaders: the Irish Hare", *Brookings Papers on Economic Activity*, (1), pp. 1-57.

Institute for Management Development (2002) *World Competitiveness Yearbook*, Lausanne: IMD.

Loewendahl, H. (2001). A framework for FDI promotion, *Transnational Corporations*, 10, 1, 1-42.

Logan, J. (1999) All the Children: the Vocational School and Education Reform 1930-1990, in J. Logan (ed.) *Teachers' Union: the TUI and its Forerunners 1899-1994,* Dublin: A.&A. Farmar.

MacSharry, R. and White, P. (2000). *The making of the Celtic tiger: the inside story of Ireland's booming economy*, Mercier Press, Dublin, Ireland.

Markusen, J. (1988) "Production, Trade and Migration with Differentiated, Skilled Workers", *Canadian Journal of Economics*, Vol. 21, 3, pp. 492-506.

Neave, G. (1982) On the Edge of the Abyss: An Overview of Recent Developments in European Higher Education, *European Journal of Education*, vol. 17, no. 2.

Nickell, S., and B. Bell (1996) "Changes in the Distribution of Wages and Unemployment in OECD Countries", *American Economic Review*, Papers and Proceedings, 86, 2, 302-308.

Ó Buachalla, S. (1992) Ireland, in B.R. Clark and G. Neave (eds.) *The Encyclopaedia of Higher Education*. Oxford: Pergamon Press.

O'Connell, P., (2002) "Are They Working? Market Orientation and the Effectiveness of Active Labour Market Programmes in Ireland." *European Sociological Review,* 18, 1, 65-83.

OECD (2001) *Education at a Glance*, Paris: OECD.

Ó Riain, S. (2004) *The Politics of High-Tech Growth: Developmental Network States in the Global Economy*, Cambridge: Cambridge University Press.

Prais, S.J. (1995) *Productivity, Education and Training*, Cambridge: Cambridge University Press.

Slaughter, M. (2003) Host-Country Determinants of US Foreign Direct Investment into Europe, in H. Herrmann and R. Lipsey (eds.) *Foreign Direct Investment in the Real and Financial Sector of Industrial Countries*, Berlin and New York: Springer.

White, T. (2001) *Investing in People: Higher Education in Ireland from 1960 to 2000*, Dublin: Institute of Public Administration.

UNCTAD (2004) *World Investment Report*, New York and Geneva: United Nations.

UNCTAD (2005) *World Investment Report: Transnational Corporations and the Internationalization of R&D*, New York and Geneva: United Nations.

Wickham, J., and G. Boucher (2004) "Training cubs for the Celtic Tiger: The volume production of technical graduates in the Irish educational system", *Journal of Education and Work*, 17, 4, 377-395.

Appendix: Education and Economic Development in an Open Labour Market

Consider a region whose economy is small relative to that of the encompassing region with which it shares an open labour market. Interregional (or international) labour mobility is most easily modelled in this case by assuming that the regional wage is determined 'abroad', in which case the regional labour supply function is horizontal. In such a case, increased education or training in the region cannot stimulate regional growth. Unless increased labour demand is forthcoming, the increased supply of educated labour will simply migrate, as in Markusen (1988).

To surmount this, we adopt a model of imperfect rather than perfect labour mobility, with the focus throughout solely on educated/skilled labour.[15] This model is taken from Barry (2002). Here migration is modelled using a "love of variety" approach, such that the proportion of their lives that educated individuals choose to spend in each of two locations – i.e. at home and abroad – is determined by the relative attractiveness of the locations.

Specifically, given a fixed amount of labour time (set at unity), individuals choose to work l_i hours in each of the two locations in order to maximise

(1) $$U = (y)^{\varphi} \left(\sum_{i=1,2} \mu_i l_i^{\theta} \right)^{1-\varphi}$$

where $\theta < 1$, $y = w_1 l_1 + w_2 l_2$ and $l_1 + l_2 = 1$.

This yields the first-order condition:

(2) $$(y/\sum \mu_i l_i^{\theta}) \, [(1-\phi)/\phi] \, \theta \, [\mu_1 l_1^{\theta-1} - \mu_2 l_2^{\theta-1}] = [w_2^* - w_1]$$

which yields positively-sloped labour supply functions; dl_1/dw_1 and $dl_2/dw_2^* > 0$

The ratio l_1/l_2 emerges as a positive function of μ_2/μ_1 and w_1/w_2^*, where w_2^* (the foreign wage that educated labour can earn abroad) is exogenous. Thus educated workers are seen to allocate their working life across locations in accordance with relative wages and their locational-preference bias.

An education-induced increase in the supply of skilled labour shifts the labour-supply curve to the right, reducing the domestic wage, w_1, as in the shift from point 1 to point 2 in Figure A1 below, and triggering increased emigration. This is the kind of situation that characterised the Irish labour market in the 1980s, before the emergence of the Celtic Tiger economy. There was net outward migration between 1981 and 1991, at a rate of 5.9 per thousand, with the outflow heavily weighted towards those with a university education. The latter point is illustrated in Table A1 which compares the estimates of Fahey, FitzGerald and Maitre (1998) of the educational attainment levels of the net outflow from Ireland between 1986 and 1991 (of migrants aged between 15 and 29 at the earlier date) with the average educational attainment of this age group across the 1986 and 1991 population censuses.

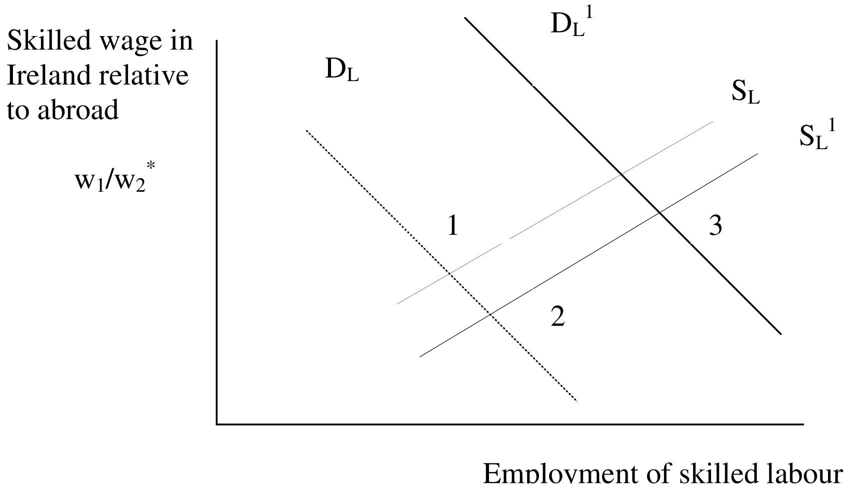
[15] As in Barrett et al (2002) we can assume that unskilled labour does not have the option of migrating. This can be justified for the period with which we are concerned because Irish rates of social welfare benefit had converged on those of the UK (to which most emigration was directed), while UK demand for unskilled labour was at historically very low levels.

Table A1:
Educational Attainment of Emigrants and of the General Population, 1986-91

	Highest Educational Attainment (%)		
	Mid-secondary certificate or lower	Full-cycle secondary education	Third Level
Emigrants aged 15-29	19	46	35
General population aged 15-29	40	49	11

Now consider the demand for skilled labour, which in the present simple model is driven by foreign direct investment. The country's ability to attract FDI is a function of three variables. The first is a vector of country-specific characteristics such as the rate of corporation tax, the English-language environment etc. Since these remain constant throughout the analysis they can safely be ignored. The second variable is the relative price of skilled labour, w_1/w_2^*. Its role is to capture the kind of MNC behaviour implied by the account given by MacSharry and White (2000) of how Intel's choice of Ireland as its main production location in Europe was influenced by the assurances it received that adequate supplies of appropriately skilled electronics engineers would be forthcoming (in the form of Irish engineers prepared to return from Silicon Valley for example). The third variable is a 'shock' term to represent, for example, the coming into being of the Single European Market.

The model is graphically represented in Figure A1.



The Single Market shock shifts the labour-demand function to the right, to D_L^1, driving the economy to a new equilibrium at point 3, triggering immigration of skilled labour. This result is again consistent with the Irish experience. By the late 1990s net immigration, consisting primarily though not exclusively of returning migrants, was running at around 4 per thousand of the resident population. These too were more highly educated than the resident population and resident labour force, as shown by Barrett and Trace (1998).

Department for Regional Development

Francie Molloy MLA
Councillor Jim Wells MLA
Joint Chair
Preparation for Government Committee
Parliament Buildings
Stormont
BELFAST 4

Room 701
Clarence Court
10-18 Adelaide Street
BELFAST
BT2 8GB

Telephone: (028) 9054 1180
Facsimile: (028) 9054 1120
Email: david.sterling@drdni.gov.uk

Your reference:
Our reference: DRDDS 209/06
30 October 2006

Dear Mr Molloy and Councillor Wells

Preparation for Government – Economic Sub Group

We understand that the Consumer Council for Northern Ireland provided oral evidence to the Economic sub Group within the terms of reference "Water Reform and the Cost to the Economy" on Thursday 26 October.

We are advised that the Hansard record of this discussion will not be available until later this week. However we understand that certain points were made on which we consider it important that the Departmental perspective should be understood by the Committee.

In our view this could best be done through a presentation to the Committee, however we are advised by your Committee Clerk that this would not be done.

While we consider it second best, we have produced a short paper which addresses some of the points which we understand were made by the Council. However in absence of the Hansard record, we have been unable to address all the points made.

We understand that comments were attributed by the Consumer Council representatives to the Shadow Chairman and to the Chief Executive of Water Service. We think it only fair that they should have an opportunity to respond to the Committee when they have had an opportunity to see exactly what was attributed to them.

Lastly, please let me know if there is any other way in which we can assist the Committee.

Yours sincerely

(Signed)
David Sterling

Committee on the Preparation for Government Sub Group on the Economic Challenges facing Northern Ireland

Water Reform Programme

1. This paper addresses some issues which the Department for regional Development understands were raised by the Consumer Council for Northern Ireland on Thursday 26 October at the Preparation for Government Economic Sub Committee.

Background to Water Reform Programme

2. For many years Government had been seeking to address the need for a step change in investment in Northern Ireland's water and sewerage services. In 2003 it had been estimated that the water and sewerage infrastructure would need £3 billion of investment over the 20 years to 2023. Water and sewerage services in Northern Ireland were costing around £1 million every day as demand for water services continued to grow, and ever increasing environmental standards were introduced by European Directives.

3. The challenge facing Government was, and is, to sustain investment in water and sewerage services over the long term. This had been difficult to do whilst Water Service was within central government and subject to three-year financial planning periods. It was clear to Government from experience elsewhere in the UK that the water industry needs long-term planning and reliable revenue streams if it is to be efficient and effective.

4. In Northern Ireland the Department for Regional Development's Water Service Agency had to compete for public funds with other public services such as health, education and transport, unlike the position in England, Scotland and Wales where domestic customers pay direct charges for their water and sewerage services. Over the past 15 -20 years since privatisation, the English water companies have invested over £50 billion in improving their water and sewerage services. This has been financed by shareholder equity and borrowing, all paid for fully by direct water charges paid by consumers and not from council taxes or general taxation. During the same period, Northern Ireland has continued to finance water and sewerage services from public expenditure, thereby depriving other public services of much needed resources.

5. By comparison people in Northern Ireland do not pay direct charges. In 2003/04 the average household in Northern Ireland was only paying around £500 in regional rates whereas the average household in Great Britain was paying between £1200 and £1300 in property taxes and water charges.

6. The general funding dilemma was fully recognised by the Northern Ireland Executive before suspension in 2002 during its Review of Rating Policy launched in May 2002. The view was taken during that consultation that there was no realistic prospect that the future funding required for the Northern Ireland water industry could be met from routine public expenditure without placing unacceptable constraints on the funding of other essential public services. The Executive also concluded that it would be unrealistic to expect the Treasury to provide additional public expenditure on the scale required.

7. Although the Executive was suspended later that year, Ministers decided to follow through on the thinking initiated by the Executive. In December 2002 Ministers announced the strategic decision to achieve radical reform in the organisation and funding of Water Service (at that stage a Central Government executive agency) so that it would become a self-financing organisation. This was considered to be the best means of achieving and sustaining a step-change in capital investment in water and sewerage infrastructure without depriving other priority public services, such as health, education and transport. Water Reform effectively became, along with the on-going review of Rating Policy a fundamental pillar of Government's plans to deliver both investment in infrastructure and modernisation of public services in Northern Ireland.

8. It was recognised that a move to self-financing status would require the introduction of direct charges for the use of water and sewerage services and radical re-organisation of the industry. It was fully recognised that this would represent a controversial agenda, which Ministers would clearly have preferred to have been undertaken by a local administration. Nevertheless Government concluded that the difficult issues associated with water had been avoided for too long, and the potential benefits for Northern Ireland public services were so great, that they had to move matters forward. In light of this the Government has taken forward a comprehensive programme of consultation over a three year period.

9. In March 2003, Water Reform was formally commenced by the publication of the public consultation document: "The Reform of Water and Sewerage Services in Northern Ireland" setting out a range of options to facilitate the water reform programme. The publication of this document initiated a public consultation which has continued over a three year period.

The Legislation

10. Legislation, which is shortly to go to Parliament will provide a framework to improve drinking water, better protect the environment, enhance the ability to sustain economic growth, improve essential services and introduce new protections for customers. The legislation will provide many new protections for consumers, for example it:

- enshrines rights to water and sewerage services (of which there are none at present);
- places general duties on all concerned to look after consumer interests and especially more vulnerable members of society;
- guarantees the provision of information to consumers (of which there is none at present);
- guarantees standards on vital issues like pressure and constancy (of which there are none at present);
- allows schemes to be made to compensate consumers where standards aren't met (of which there are none at present);
- prevents disconnection of water for domestic premises for non-payment of bills;
- provides for new complaints procedures based on existing utility models; and
- provides for a much more robust system of enforcement where environmental protection is concerned (currently, enforcement action can't be taken against Government because of "Crown Immunity").

Impact of Delay

11. The Government is committed to the introduction of domestic water charges from 1 April 2007 as part of its programme of public service reinvestment and reform in Northern Ireland. These reforms have already been delayed a year to take account of concerns on affordability and metering. Government appreciated that the introduction of new charges is never popular but they will be a reality.

12. We understand the Consumer referred to an apparent discrepancy between the figures quoted by David Cairns MP and the Secretary of State. In fact, the two Ministers were referring to different periods – David Cairns to 2007/08, the Secretary of State to the phasing-in period. Naturally, the figures will be different as there would also be less income from new charges in 2008/09 as phasing-in would also be delayed.

13. The possible costs of delay have not been calculated in any detail and it would require significant effort to do so. However, in the event of a delay in the introduction of charges until April 2008, it is estimated that some £80m - £90m of income from customers would be foregone. Additionally access to the borrowing power of up to £200m annually under the Reinvestment and Reform Initiative is conditional upon the introduction of water charging. In the absence of detailed costing, the range of £130 million to £180 million represents an indicative estimate of the impact of delay.

14. It is worth noting that any delay in the introduction of reforms could have other implications aside from public expenditure consequences. For example, on the environment, current plans are well in hand to introduce new abstraction licensing and discharge consenting arrangements which will strengthen protections for the environment and normalise environmental regulation following the loss of "Crown Immunity"

15. Indeed, the Department of the Environment's view is that the appointment of Northern Ireland Water Limited as the licensed water and sewerage undertaker for Northern Ireland on 1 April 2007, in place of the Department for Regional Development, is the most appropriate course of action to take to ensure effective environmental regulation of the water and sewerage industry in NI.

16. Furthermore, the removal of Crown Immunity from Water Service is the only means by which the Department of the Environment could regulate Water Service in a way similar to that of external public and private bodies. The quickest means of achieving this remains the appointment of Northern Ireland Water Limited on 1 April 2007 as licensed water and sewerage undertaker under the draft Water and Sewerage Services (Northern Ireland) Order 2006. The failure of the Department of the Environment to regulate Water Service in the same way as external and private bodies due to Crown Immunity is already the subject of infraction proceedings. DOE's view is that any delay in the establishment of Northern Ireland Water Limited would seriously prejudice the UK's defence against such proceedings.

Strategic Financial Review of Water Service

17. In April 2007, Water Service is to become a Company wholly-owned by Government to be known as Northern Ireland Water Limited. At the same time the Northern Ireland Authority for Energy Regulation (NIAER) will assume responsibility for the economic regulation of

the Company and the General Consumer Council for Northern Ireland (GCCNI) will act as consumer representative on water and sewerage issues.

18. In August 2004, the then DRD Minister announced the intention to conduct a Strategic and Financial Review (SFR) of Water Service to provide advice on a range of strategic options for financing and managing the new company. The SFR Review Report made a number of recommendations. The Government published the Report on 9 February 2006 and set out the decisions which it had taken on several of the main issues identified within it (it is available at www.waterreformni.gov.uk).

Structure

19. The Consortium who conducted the Review were asked to look in detail at two structural and financial options for the future delivery of water and sewerage services: a government corporation model under which Water Service would be government-owned, but subject to Companies Act legislation; and a Private Sector Participation model involving a mixture of public and private sector equity ownership of Northern Ireland's water and sewerage services.

20. The Government noted carefully the report's conclusions that the greatest efficiency improvements in the service, and thereby lower bills for customers, are likely to be realised where the company enjoys independence from Government and private sector participation. It concluded however that it would not be practicable nor sufficiently acceptable, in the short-term to introduce private sector equity participation and has decided that NIWL should be wholly-government owned when it is established in April 2007. Opportunity for greater private sector participation will be reviewed in 2008.

Recommended Regulatory Framework

21. The Government has accepted the Consortium's recommendation that the regulatory framework for NIWL should be based on the OFWAT model currently operating in England and Wales. This framework is being adopted as a means of incentivising NIWL to:

- achieve continued efficiencies and lower tariffs;
- implement and deliver an efficient and effective customer service system; and
- meet domestic and European water quality and environmental standards.

22. The regulatory regime will include risk mitigation mechanisms such as interim pricing determinations to deal with unforeseeable circumstances and will come into effect from April 2007.

Corporate Governance

23. NIWL's Board will be appointed in accordance with the Combined Code of Corporate Governance. The legal and corporate governance structure will be established with the objective of:

i. maximising the likelihood that efficiency gains can be realised;

ii. ensuring there is accountability to environmental and water quality regulators as well as to customers for the quality of the service provided;

iii. ensuring there is clarity about the nature of the relationship between the Government and the company to reduce political and regulatory risk.

Capital Structure and Tariffs

24. The Government's objective for NIWL is to establish a company which has a stable and sustainable capital structure so that taxpayers are not subject to unacceptable financial risk. To help achieve this, a policy and regulatory framework is being developed by Government, which will require that the Company should deliver sustained positive returns and return its cost of capital over time. The cost of capital represents the opportunity cost that the Government faces when investing taxpayers' funds in one particular business or activity rather than another.

25. A detailed charging scheme for this period will be published in late 2006 which will set out in detail the charges that will apply from April 2007. The charges will be phased in over three years (on a one third, two thirds, full charge basis). To further ease the transition, a special Affordability Tariff will be introduced to ensure around 200,000 low-income households do not need to spend more than 3% of their income on water and sewerage charges.

26. The opening allowed real rate of return for NIWL is being set at 5.8%. This rate has been determined on a basis that is consistent with the approach for setting allowed rates of return for both private and publicly owned utilities. It reflects the fact that risk in NIWL will be higher at least in the early years than in the English and Welsh water and sewerage companies. It is also consistent with the Treasury's guidelines on setting required rates of return for state-owned companies. DRD will be required to obtain a dividend from NIWL to match the cost of capital charge in the DRD Departmental Expenditure Limit (DEL).

27. The Regulator will set future rates of return at each Periodic Pricing Review. A first Periodic Price Determination will be conducted by the new Economic Regulator in 2009. This Determination will set tariffs for 2010-2011 onwards

28. The opening asset value of NIWL (the Regulatory Capital value or RCV) will be £1 billion. The RCV is a proxy for the current value of NIWL's assets. This value will change over time to reflect the ageing of existing assets and investment in new assets. The cost of ageing assets will be recovered through infrastructure renewal and depreciation charges. The RCV is multiplied by the allowed rate of return to establish the cash return allowed on the RCV. This should ensure that customers only contribute towards those assets that have been created and which provide a benefit to customers.

29. As Government has decided to set charges in the period to 2009-10 on an England and Wales average basis, efficiency targets for operating and capital expenditure will be an important element of this equation and will be commensurate with this requirement. A precise efficiency target for NIWL will be set following discussions which are currently ongoing.

CCNI Concerns

30. We understand the Consumer Council expressed reservations about a number of issues including the fairness and affordability of tariffs, land disposal and the future ownership of the company.

31. In considering these issues it has been clear to the Department that it shares the same broad objectives as the Consumer Council – it wants to see improvements in the quality of water and sewerage services for all customers in Northern Ireland; it wants to ensure there is reliable and sustainable investment in the infrastructure and that this should be paid for through charges which are fair and affordable to consumers.

Affordability Tariff

32. The Affordability Tariff will be in place for the first three years with a commitment to review this in 2009. It is a policy which has been devised with the clear intention to avoid water poverty, particularly amongst the most vulnerable in society. The Government can see very strong arguments for the policy being continued beyond 2010 but considers it would be wrong to commit a future devolved administration to such an obligation. It will represent a substantial financial commitment – perhaps in the region of £40-50 million per year. The Government also believes it is right that the policy should be reviewed after three years to ensure it is targeting resources where the need is greatest.

33. However, it is the Government's clear aim that the Affordability Tariff should come into effect during devolution and hence it will be devolved ministers who will be required to conduct the review of the Tariff in 2009. The important point is that there is nothing in the draft legislation to prevent the extension of the Affordability Tariff beyond 2010 if ministers so decide in the future.

Price-setting

34. Government has committed that tariffs for domestic customers should be limited to an England and Wales average by 2010, with a pegging and phasing subsidy to cover the shortfall against costs, while tariffs for non-domestic non-metered customers progressively step up over this period to cost reflective levels. There will also be additional vulnerable customer subsidies and "domestic allowances" for smaller non-domestic metered customers whilst NIWL can recover full costs from non-domestic metered customers. Within this framework of Government commitments, protecting customers from price rises is largely provided for.

35. On this issue Government again has a shared objective of ensuring that tariffs are fair and affordable and not subject to major increases in 2010. To deliver this, a key aim for the Government is that the water company should become commercially accountable to customers through the Regulator notably by it setting prices independently from government. This will make the services more responsive to customers' needs and drive out efficiencies in the running of the business thereby keeping tariffs to the minimum necessary whilst providing for a sustainable long term business.

36. The Government is keen to ensure that the water company delivers these benefits as soon as possible and has set the target of 2009/10 by which the company should be fully self-financing.

37. Tariffs from 1 April 2010 will be set by the Regulator following its 2009 Price Review. It is right and proper that that review is independent. However, the Government is seeking to set up the company so that there are no major shocks for customers in tariffs in 2010/11. The Department and Water Service are currently working hard to ensure that the underlying cost base of the company is such that the Regulator is in a position to set prices in Northern Ireland that are fair and affordable by comparison with those in England and Wales and as close as possible to average tariffs there, taking account of the challenges ahead for the Water company.

38. It would of course be open to a devolved Assembly to give a commitment to peg the tariffs to any particular level by means of a continuing subsidy, should they feel that necessary and appropriate. However, for the reasons set out above, the Government considers it would be unfair to commit a future devolved administration to a given level of tariffs, especially in advance of the 2009 Periodic Review.

Land Disposal

39. The Government understands how important the regulation of land disposals is to customers. Final decisions on policy in this area have not been settled and the Consumer Council's views are still under consideration. However, the important point is that as the new company will be wholly owned by Government, any disposals of land will either be for the benefit of the Department or the Company and hence the benefits will be for either the taxpayer or consumers.

Efficiency

40. The initial targets were set to focus the company in planning its strategy to meet the ministerial policy objectives. The Department is working with Water Service with a view to ensuring that the efficiency levels attained by 2009/10 and beyond will be the maximum possible, consistent with the need to ensure the company is financially sustainable, that it can deliver appropriate levels of service to customers and ensure that environmental obligations are met. The tariffs from 2010 onwards will be set by NIAUR through a Price Determination process similar to that of England and Wales. We expect that the Regulator will adopt a similar approach on efficiencies to that of England and Wales.

41. The licence will set out the extent to which the company can recover its costs from customers. As a public corporation the company will be constrained to obtain any other funding (eg lending) from DRD. Additionally should NIWL under-perform and be unable to pay the dividend in full, the shortfall will be borne by the taxpayer not customers. This approach is consistent with the treatment of other public corporations and it is designed to ensure that the UK taxpayer gets a return on investments made from general taxation.

Privatisation

42. Ministers have said publicly that the new company will remain in Government ownership for the foreseeable future. Article 273 in the draft legislation prevents the Department disposing of shares in GoCo to the extent that ownership of the company would no longer be controlled by the Department unless there is a resolution of the Assembly.

Department for Regional Development
October 2006

Federation of Small Businesses

Proposals for a Financial Package for Northern Ireland
A Rates Reinvestment Fund For Northern Ireland

Introduction

The Federation of Small Businesses is now Northern Ireland's largest business organisation with over 6000 members and growing from every sector of industry. FSB lobbies all decision makers to create a better business environment.

It is acknowledged that there must be a package of financial assistance to underpin any political agreement to restore devolution to Northern Ireland.

Due to a number of factors, the cost of doing business in Northern Ireland has risen considerably in recent years, and there are indications that this rise will continue.

A firm foundation for the growth of our local Economy and the basis of a Financial Package has to be built upon our typical indigenous small businesses which currently make 98% of all business in Northern Ireland.

The FSB want to see these businesses remain viable, expand, develop new products and markets and above all increase employment.

A second crucial element for a Financial Package must be to attract more Foreign Direct Investment to Northern Ireland. Our proposals for a Rates Reinvestment Scheme will be beneficial to both developing indigenous businesses and FDI.

The FSB has consulted closely with Northern Ireland's political representatives, in relation to our proposals. This includes a verbal and oral submission to the Preparation for Government economic sub-group at Stormont, to which a positive response has been received. In addition we are publishing policy action plans for Skills & Training and for Reviving our Retail Sector.

We wholeheartedly support the Preparation for Government committee position that there is a need to urgently implement a plan to move from our dependence on the public sector to a greater private sector-led economy.

We must grow our private sector if our economy is to be sustainable and can underpin a political settlement.

The FSB wants this document to stimulate debate and discussion in the coming discussions which form the basis of Financial Package for Northern Ireland.

Wilfred Mitchell OBE
Policy Chairman

Our Proposals:

Small Business Rates Relief Scheme (SBRRS)

Northern Ireland is the only part of the United Kingdom which does not have a Small Business Rates Relief Scheme. Ironically, it is this region which is most dependant upon small business as the driver of its economy, and if the economic situation is to be improved, then measures will need to be implemented which benefits this sector.

It is the view of the Federation of Small Businesses that this financial assistance can be best served through the introduction of a 'Small Business Rates Relief Scheme'.

Small businesses require a stimulant to encourage them to develop their enterprises. With this in mind the SBRRS would take the format of a 'Rates Reinvestment Fund'.

The FSB recommends that a Rates Reinvestment Fund be implemented in the province for a ten year period which would offer qualifying businesses 50% rates relief.

It should be noted that the schemes in England, Scotland & Wales do not have a requirement for reinvestment of savings, although Northern Ireland differs because it is currently being considered in the context of the wider economic assistance package for post-conflict Northern Ireland.

What are we proposing?

50% rates relief over a ten year period would be conditional upon the savings being reinvested into their businesses, the principle objective being to give businesses an incentive to expand or modernise to meet the economic challenges in the years ahead.

This would provide businesses with a 'window' to create a feasible capital expenditure plan. They must clearly demonstrate how they intend to use the capital saved by this rates relief to grow their businesses.

With such a reduction in capital, businesses could reinvest the savings in employing more staff, investing in new equipment, upgrading their premises, improved training programmes for staff, marketing new products, expanding export opportunities, or investing in Research and Development.

We would also take the view that for the duration of this ten year period the current 25% Rates Bill for Manufacturers should be frozen to assist in building up this crucial sector struggling with the introduction of Industrial De-rating.

In addition the Government should set up a full independent review of the Non-Domestic Rating System looking again at the method of assessment for the valuation of a property, how they sub-divide the various sectors and the many other issues that small business owners have with the current Rates Valuation System.

What are the Cost Implications?

According to the Department of Finance & Personnel, over £450 million is taken in non-domestic rates per annum. Over a ten year period this would amount to £4.5 Billion.

In order to ensure that key public services do not suffer as a result of this reinvestment, we are proposing that the Treasury set up a 'Rates Reinvestment Fund' of £3 Billion to cover the costs of a 50% rates reduction and other associated costs.

This figure of £3billion is not unrealistic as it represents half of Northern Ireland's annual subvention from the Treasury, and indeed, some of our political parties have been putting forward much larger figures.

We believe that this Rates Reinvestment Fund would enable our smaller businesses to withstand the severe financial burden being placed upon them, perhaps even expand and increase employment figures.

If half of our 65,000 small businesses in Northern Ireland were to employ just one more member of staff, this would then generate the increase in employment which is urgently required, and would result in higher Income Tax and National Insurance contributions.

What are the benefits of the Rates Reinvestment Fund Proposal?

1. Would enable our indigenous business sector to reinvest more of their capital into expansion

2. This proposal is not a 'blank cheque' as businesses would not qualify for the 50% rates reduction unless they outline how they will use the money to expand and thus grow our wider economy

3. Would act as a considerable incentive for Northern Ireland to attract Foreign Direct Investment.

4. Would be more effective than Corporation Tax reductions as many small businesses do not pay this taxation and additionally, should not lead to demands from other parts of the UK as small business rates relief schemes are already in place.

5. Would help the burden of businesses suffering from the cost of compliance with EU and UK regulations, high insurance, electricity, gas, transport costs, crime and the introduction of Water Charges

6. Would address the concerns of the Manufacturing Industry who are struggling with the introduction of Industrial De-Rating

7. This would be a ten year time limited plan which could be evaluated and reviewed at appropriate intervals

8. Since the proposal is time limited then if there are European State Aid issues, a temporary exemption could be sought by the UK Government

What are the administrative requirements?

For these proposals to be attractive to small businesses it is essential that the administrative burden is kept to a minimum. Small businesses already spend a considerable amount of time completing financial returns, and to add to this would be counter-productive.

The various government collection agencies obtain a vast amount of financial information from each small business each year. The FSB proposes that this information form the basis of administrating the Rates Reinvestment Fund. To do so would require an innovative joined-up government strategy.

The FSB will continue to take soundings from both our membership and the statutory agencies, to further refine the administrative requirements of this proposal.

Professor John V McCanny, Director of the Institute of Electronics, Communications and Information Technology

Sub-Group on the Economic Challenges facing Northern Ireland Submission by

Professor John V McCanny CBE FRS FREng

The views submitted in this document are personal ones resulting from my role as Director of the Institute of Electronics Communications and Information Technology at Queen's University Belfast, my involvement with the local Industrial Task force, chaired by Sir George Quiqley and my involvement in the recent Irish Academy of Engineering "Knowledge Island 2020" review.

This submission follows a presentation I made recently to the Northern Ireland Economic forum entitled "Innovation and Intellectual Property – Creating the Right Fiscal, Research and Enterprise Environment". Its purpose was to (a) summarise the main recommendations of the Industrial Task force and (b) issues relating to the support for R&D and the creation of intellectual property and (c) creating the type of fiscal and enterprise environment to help promote a step change in the Northern Ireland economy.

The presentation below follows two of the main Industrial Task force recommendations namely

- Stronger coupling of the University Research base with economic development
- Competitive corporation tax rates in Northern Ireland

The document comprises six sections

- An example of existing activity coupling university research to economic development, namely an overview of the Institute of Electronics, Communications and Information Technology (ECIT) at QUB.
- A brief summary of the findings of the Industrial task force.
- Relevance of the Industrial Task force findings to Advanced technology R and D
- A summary of the Irish Academy of Engineering "Knowledge Island 2020" study
- A brief discussion of the Republic of Ireland's "Strategy for Science, Technology and Innovation 2006-2013
- An overall summary

The Institute of Electronics Communications and Information Technology (ECIT)

Queen's University Belfast
Overview and Summary of Achievements to date

1. Project Background

The final funding to create the Institute of Electronics Communications and Information Technology (ECIT) was secured on April 1st 2003 following agreement by Invest Northern Ireland to provide Research funding worth £8.3M profiled over 5 years. This was in addition to funding from the Department of Employment and Learning of £5.2M along with a commitment by QUB to invest £24.3M over the first 5 years of the project, primarily in the form of staff salaries. Activity on the project began almost immediately focusing on two main initial objectives (a) the recruitment of new staff and (b) the building of the facility on the NI Science Park. Most of the new appointments have now been made and the new ECIT building was opened in September 2004, with the Institute being formally launched in May 2005. The facility now houses over 130 people and the plan is to grow this to around 175 by the end of the initial 5 year period.

2. Overall Vision

The creation of a world leading research facility that specialises in key and interrelated areas of electronics, communications and computer technology, that under-pin important opportunities for industrial and commercial application over the next decade. A key aspect is international research excellence, strong links with industrial and academic research laboratories world-wide and a facility that will attract and train future generations of highly talented electronics engineers and computer scientists. Innovation, entrepreneurship and support for economic development in general are also key aspects of the Institute's mission.

2.1 Current Mission statement

"To stimulate major opportunities for *economic growth*, by *pioneering* future directions and innovation in *key areas of advanced technology* through the *integration of complementary research* expertise in a world-leading facility".

3. Why was the Institute created?

Many of the developments that have been occurring in what are now increasingly convergent fields such as communications, computing, digital multi-media require a much closer coupling of key enabling technologies that was previously the case. QUB has recognised international research in many of the required technologies. Thus one aspect of the initial vision for ECIT was to bring a critical mass of these activities together in a new purpose built and flagship research centre and to build on these with the aim of establishing world leading research activities in carefully chosen areas of expertise. The location of the Institute (on the

N Ireland Science Park) was chosen to strongly reflect its strategic importance also to economic development through close ties with industry and the fostering of innovation and enterprise through the creation of spin-off and spin-in companies. Thus there is a desire to build strong links to industry and where appropriate align longer term industrial road-maps with research activities - basically taking an “over the horizon view”. At the same time it is essential that the Institute does not compromise its much more speculative “blue –skies” research and the pioneering aspect of its mission.

3.1 Function and Major Objectives

- To establish (in Europe) an international flagship research facility undertaking research in key and carefully chosen areas of electronics, communications and computer technology and through this contribute strongly to high technology economic development.
- World –class research and innovation
- To provide a healthy balance of “blue skies” and strategic/industrial related research
- In carefully chosen areas to lead the way in defining new areas of electronics, computing and communications technologies
- Provide a critical mass of top quality researchers including staff with extensive industrial experience, research staff and PhDs
- Provide and environment for the creation of spin-in and spin-out start-up companies
- Provide support for Foreign Direct Investment (FDI)
- Leading the way in defining a significant new era in electronics, computing and communications technology
- Initially 85 people growing to 175 over 5 years
- Hot-house new start-up companies, facilitate spin-in companies
- Promoting strong industry research links - two way exchange local, national and international industry
- Major expansion of skills for high technology based economy
- Strengthening links with major university and industry research centres worldwide
- Develop a new generation of high technology engineers and entrepreneurs
- To be an exemplar in the UK and Europe of an Institute that combines leading edge research with innovation, entrepreneurship and economic impact.

4. Current Management Structure

The Institute is an integral part of Queen’s University Belfast and is part of the School of Electronics, Electrical Engineering and Computer Science.

It comprises four major research divisions (“clusters”) each led by a Research Director These are

- Digital Communications

- High Frequency Electronic Circuits
- System-on-Chip Architectures and Programmable Systems
- Speech, Image and Vision Systems

The overall management of the Institute is the responsibility of the Director, Professor J McCanny supported by a Director of Operations (Research), Dr G Gaston and a financial controller...

Each research division typically comprises 30 to 50 people and involves Academic staff, new experienced R&D staff recruited through initial ECIT funding, Academic Support staff, clerical staff, Post and Pre Doctoral Research Assistants and PhD students.

5. Benefits

ECIT has and will continue to contribute significantly to

- The research base and the international research standing of Northern Ireland
- Opportunities for international research linkages with industry and academia
- The further attraction of high technology inward investment companies in electronic communications and computer technology including software
- The growth of successful indigenous high technology companies in this area
- The creation and successful development of new high technology start-up companies
- The training of future generations of the brightest electronics engineers and computer scientists
- Act as a major driver for the new knowledge based economy
- Job creation

6. Values

Our **values** underscore our relationship with all our stakeholders and help everyone new to the Institute understand the role modelling ethics which support our culture.

People – Our goal is for everyone in ECIT to respect one another and to treat each other in a manner in which we would expect to be treated ourselves. Our people understand that whilst valuing diversity, our mission and objectives will only be achieved through teamwork which will require everyone at all times to be co-operative, constructive, open and honest. Our people will remain approachable and easy to talk to, regardless of their position within the Institute. We will strive to provide the highest levels of health and safety for our people at all times.

Culture – We want ECIT employees to believe they are pioneering future directions in key areas of advanced technology. We will encourage our people to speak out and take risks. Through cross-fertilisation of ideas we will recognise and reward high achievers both at individual and team level.

Innovation – Innovation is critical to the success of ECIT. Our goal is for research to be fun. We will encourage everyone to think out of the box and have the confidence to dare to innovate.

World-leading – We will strive to be recognised to be the best, through carrying out world-class research and development. We will continually benchmark ourselves against best-in class.

Customer Focused – Our goal is to satisfy our customers' (both internal and external) needs and expectations. We will only make commitments we can keep and will strive to deliver on these on time, every time. When circumstances arise and we cannot deliver, we will be honest and find an accountable way to respond.

7. Initial 5 year goals and Progress to date

- To create new facility on Northern Ireland Science Park

  New building completed on time. Moved in September 2004, official launch May 2005

- To grow the institute to 174 employees (direct ECIT employment)

  After 3 years over 130 people now involved and growing steadily. Very high calibre of people recruited including many with strong industrial experience.

- To receive total industrial research and development income of £3,06K in that period

  Total commercial funding to date £4.0 M, already ahead of 5 year target

- To significantly increase overall research funding

  Total new research funding obtained to date now over £12 M (includes £5.4M to create a new Centre for System on Chip and Microwireless Integration SoCAM worth over £5.4M, other funding a mixture of EPSRC, industrial and other (e.g. INI proof of concept funding).

- To further increase major national and international research links

  Examples MIT, UT Austin, North Carolina, University of Calgary, Helsinki, Lund, National Taiwan University, National Chaio Tung University(Taiwan), University of Manchester,

  Ireland's Tyndall National (ICT) Institute (UCC), Imperial College London

  University of Edinburgh

- Major strategic partnerships with industry nationally and internationally.

  Many examples including Phillips, Astrium, Xilinx, Sony, Infineon, Agilent, HP, Silicon Graphics, Qinetiq, Nortel, TDK, Daimler Chrysler, British Aerospace.etc., on going discussions with many others

- To provide a mechanism whereby rapidly growing indigenous high technology companies can engage in longer term research and development

  Now actively involved with numerous indigenous including Andor, Amphion Semiconductor (former spin-off acquired by Connexant Systems in 2004), Stream-On, Asidua, Wrightbus, APT etc.

- To publish widely in major peer reviewed journals and international conferences

  Over 600 major journal papers and (IEEE, IEE) International conferences, several research books published to date. Also many invited talks and keynotes.

- To demonstrate quantifiable measures of international research esteem.

  1 Fellow of the Royal Society 2 Fellows of the Royal Academy of Engineering, 2 IEEE Fellows (based in the US), 1 member of the European Academy of Sciences, numerous IEE Fellows (Institute of electrical Engineers) and IEEE Senior members, numerous awards including IEE (now IET) Faraday medal (IET's highest honour) IEEE Millennium Medal, Royal Academy of Engineering Silver Medal, Royal Dublin Society/ Irish Times Boyle Medal. Considerable involvement in IEEE conference organisation. Many staff involved in EPSRC peer review colleges, EU peer review etc.

- To establish an international advisory board

  Board established includes representatives from Infineon, Xilinx, TDK,BT, Daimler Chrysler, University of California at Berkley, University of Austin at Texas, University of Aachen, University of Manchester, Cambridge University etc. Four monthly board meetings now taking place.

- To be a major attractor for high technology inward investment

  Over 150 visits by major companies in past 3 years, support for INI missions to Asia (Korea, Japan, Taiwan on several occasions), numerous visits to US including recent tour of east coast, DTI's UK Semiconductor Roadshow to Japan (2004, Tokyo, Osaka, Fukuoka))

- To increase the number of patents filed

  17 patents filed to date, numerous applications in the pipeline

- To identify and provide the necessary support for new company formations

  Now actively involved in this including strong linkages to QUB's QUBIS organisation, increasing links with local and international Venture Capitalists, numerous enterprise and proof of concept awards including first and second place in the Irish Enterprise awards 2005, 2006 (hosted this 2006), numerous prizes in the local Investment Belfast £25K award. Enhancing the infrastructure for knowledge transfer and commercial exploitation now a priority within ECIT (and QUB in general).

- To identify 5 spin-out company formations per annum by year 5

  5 potential spin-outs identified, four "proof of concept awards" obtained to develop research concepts to demonstrator devices (approx £600k).

- To identify 5 spin-in company opportunities by year 5

  Four spin-in companies to date - TDK, Mobimatics, Quantum Wireless and Ubitronics. Another under discussion.

8. Wider context – Northern Ireland Science Park

Early in 2003, the current Science Park site was a derelict one at the top end of Queen's Road on the old Harland and Wolfe Shipyard site. Today there are four major buildings (a) the

Innovation centre (b) the ECIT building (c) the Legacy Building and (d) White Star House, with a further 3 new buildings planned. In May 2003 when the foundations for ECIT were dug no one was employed on this site. Today there are an estimated 500+ with this growing rapidly.

The Industrial Task Force

The findings of the industrial task force have already been communicated to the economic sub-committee through its chairman Sir George Quiqley. These have highlighted what the task force sees as major impediments to the development of the Northern Ireland economy. Key issues are:

- The “wealth gap” with the rest of the UK persists with Gross Value Added (GVA) per head around 80% of the UK average.
- Job growth has been good but labour productivity has dropped by 7% from 88% of the UK average to just under 82% between 1998 and 2004
- Productivity in the production sector (including manufacturing) has improved but declined from 88% in the service sector to 78%. Job increases have been in the service sector however, with a 13% decline in manufacturing. The GVA of service sector jobs is only 72% of manufacturing.
- The private sector needs to grow by 188% to achieve the UK average public/private sector balance.
- Public sector 34% of employment but only 27% of GVA
- Current estimates are that convergence based on current activity will take around 1350 years! The chances of closing the “wealth gap” with the UK based on an employment boom in low productivity jobs is therefore remote, still less drawing level with the Republic of Ireland which has now overtaken the UK.
- Foreign direct investment in the Republic of Ireland between 1995 and 2004 was 25x that of Northern Ireland and much more linked to the Global economy.
- Sales of the Republic’s manufactured goods outside the British Isles are around 14x the figure for Northern Ireland
- In Northern Ireland the public sector represents up to 71% of economic output
- Need much stronger attraction of high value inward investment to develop international trade as well as to more rapidly grow local export based entrepreneurial activities.
- It is the task force’s belief that incremental changes are not going to address the problem but that a step change is required
- A key differentiator between North and South is the 30% corporation tax NI v 12.5% in RoI,

- A recent study of the effective tax rate in 25 EU countries has shown this to be 14.7% for the RoI compared with 28.9% in the UK. The RoI rates is bettered only by Cyprus at 9.7%, Lithuania at 12.8% and Latvia at 14.4%.
- The task force strongly believes that the Corporation tax differential is a major impediment to economic growth in Northern Ireland.
- The task fore also strongly believes that there is a need to invest strongly in the skills base needed to create and develop a modern economy, that much greater investment is needed in research and development and that there needs to be a closer alignment between the role of the universities and economic need and potential economic growth.

Relevance of the Industrial Task force findings to Advanced Technology R and D

- We do have world leading R&D in areas of technology highly relevant to major developments in the electronics and IT sectors and this has over the years been useful as a magnet to attract inward investment and new company creation.
- There have been numerous success stories with examples being Seagate and Nortel. We have also seen recent investments (albeit relatively small) by companies such as SAP and Conexant (both US companies).
- However, we are simply not in the same league as RoI in terms of level, size and jobs created.
- Our expertise and education/intellectual expertise is recognised and strongly respected. However, the tendency has and is towards intellectual backroom work rather than major export led development . Good examples of this are in fields such as software, telecommunications and chip design (both digital and RF).
- However, recent important R&D based FDI projects have gone to the RoI when one might argue that much stronger levels of relevant technical expertise are available here. One important difference, however, has been the prior existence of a large manufacturing or development operation from the companies or organisations in question.
- A number of the RoI based centres have developed strong relationships with universities in Northern Ireland not least because it provides a healthy location for staff recruitment.
- The case of Galen was strongly highlighted during the task force deliberations. In this case the innovation and intellectual property was developed in Northern Ireland. However, major manufacture of products was subsequently moved to Puerto Rico to take advantage of the favourable Corporation tax there, because of the imperative need as a publicly quoted company to maximise shareholder value.
- The assertion therefore is that until the wider fiscal environment is changed that Northern Ireland is likely to see economic benefits that result in R&D investment but

that these are more likely to be backroom "intellectual based" jobs that create wealth through increase in salaries and through retention of bright young people but probably will not see the multipliers in terms of major growth in export or tradable goods or services jobs that have for example occurred in the Republic and turned it into a major export platform.

- We therefore need to create the conditions where the major impetus in high technology industry in the RoI does not see borders of barriers at Dundalk, but rather both parts of the island can work in tandem for mutual benefit, for example FDI companies in the south expanding their operations into Northern Ireland to the mutual benefit of both parts of the island. Clearly an equitable fiscal environment is essential not only to achieve that but more generally to get Northern Ireland on the radar screen when multinationals are seeking a location for their investments. We will then be able to capitalise on the strengths of the type described in this paper which can be put at the disposal of such companies.

Knowledge Island 2020

The input given below reflects the author's recent involvement in the Irish Academy of Engineering's "Knowledge Island 2020 task force. Full details are available in the report – see www.iei.ie/home/docs/KI2020.pdf. An important aspect of the study was to consider the Science and Engineering skills base that would allow the Island of Ireland to have a world top 5 economy by 2020 when measured in terms of income per head. As discussed in the report the economic study undertaken indicates that to achieve this (amongst other recommendations)

- The supply of engineers needs to be increased by 7% p.a. that of IT staff by 6% p.a. and the number of PhDs by 13% p.a. year on year.
- There is a need for world class Engineering and IT research centres that closely collaborate and share resources, avoiding where possible duplication of effort.
- Careers in engineering and science careers need to be promoted and encouraged much more intensively.
- Major efforts should be made to attract women into Science and Engineering with an overall objective being 50/50 male/female split.
- There needs to be a strong Increase in graduate and research output
- There should be increasing links between universities and industry

Further details are available form the final report. This report was well received in Northern Ireland and in the Republic. In the case of the latter new initiatives have already been implemented to address the issues raised, including ones that will further increase the numbers of Science and Engineering PhDs in the Republic's universities.

The author is unaware of any similar initiatives in Northern Ireland and has to draw attention to worrying trends in the opposite direction. Firstly, the numbers of students applying to undertake degree studies in subjects such has Electrical and Electronics Engineering and Computer Science has dropped considerably in recent years, particularly in Electrical and Electronics Engineering where the number of students for example at QUB has dropped by around 60% of what it was 5 years ago. This reflects UK national trends and we believe is related to the drop in students studying STEM subjects at A level, notably Physics. Clearly important initiatives or incentives are required if these trends are to be reversed.

Moreover, whilst PhD numbers remain reasonably healthy, the number of applicants from UK domiciled students taking PhDs continues to drop (probably not unrelated to the impact of student debt on graduation). The overall numbers reflect increasing numbers of overseas students with a strong proportion of these from SE Asia, in particular China. In the past many of these people remained and have contributed strongly to the local economy. However, increasingly they are returning home to avail of increasing opportunities there. Thus, as with the economic trends discussed above, there are concerns that the skills base to support a "knowledge base economy" may be a limitation to economic growth and expansion. In short, there does not appear to be the same urgency, recognition or action in Northern Ireland of important skills issues that are being given high priority in the Republic. This has the potential to undermine the activities, for example, of Invest NI in attracting advanced technology FDI to Northern Ireland i.e. the potential lack of sufficient numbers of skilled people.

ROI Strategy for Science Technology and Innovation 2006-2013

Attention should also be drawn to the recent Republic of Ireland Strategy for Science Technology and Innovation 2006-2013. This comprehensive document is available from www.entemp.ie/science/technology/sciencestrategy.htm

Amongst many other things this recognises that

- Manufacturing and international services will remain significant drivers for economic growth
- To become world leaders in Science, technology and innovation strong foundations must be built in primary and secondary level education
- It also recognises the potential for collaboration on an all-island as well as an international basis

A key part of this strategy is the role to be played by Science Foundation Ireland (SFI). SFI has already invested heavily in Irish Research and Development at university and industry level, with a further 1.8 billion Euros due to be spent in the next five years. This has led to the attraction of major research teams in key technical areas from overseas, including teams from major US and UK universities and research labs. It has also led a number of major ICT and biotech companies establishing European Research Operations in Ireland. Much of the resource that has led to this investment has come from the tax revenues generated from a buoyant economy, which in turn has resulted from a low corporation tax policy.

Locally Invest NI and wider UK sources (e.g. the Engineering and Physical Science Research Council - EPSRC) have provided important R&D support over the years. However, in terms of funding levels it is difficult to envisage in the longer term how Northern Ireland can compete with the Republic unless this becomes an important part of a "peace dividend" or a future assembly economic strategy. This also prompts the suggestion of linking with SFI to avoid duplication of effort on an Island basis and to promote collaboration to establish critical mass and to allow the Island as a whole to compete more strongly in global economic terms. This perhaps could be done through some of the existing North-South mechanisms and or the US-Ireland scheme currently in existence, perhaps also linking with the UK's EPSRC. From the author's point of view an SFI scheme in Northern Ireland alone would probably not achieve the level of critical mass needed to compete globally.

Conclusions

- In conclusion, the Industrial Task force has made a number of important recommendations. These can be summarised in simple terms as "Tax and talent".
- The first has highlighted the essential need for corporation tax rates in Northern Ireland to be competitive with those of the Republic of Ireland as essential to promoting a necessary step change in the Northern Ireland economy.
- The second highlights the need for a stronger coupling of the University Research base with economic development. One example of this has been highlighted – the establishment of the Institute of Electronics Communications and Information Technology on the Northern Ireland Science Park. This is important but it is only a beginning.
- The ability to fully capitalise on the opportunities that may arise from the research and any multipliers that might result are highly dependent on the Fiscal and Enterprise environment that exists within Northern Ireland.
- Important issues are beginning to emerge in terms of the supply chain of advance scientific and engineering skills where urgent action is needed going right back to primary schools. Indeed it may be argued that a much more integrated "end-to-end" strategy linking education at school and university level, through R&D and industry to a wider economic agenda is needed.
- A key question is "Where do we want to be by 2020 and how are we going to get there?"
- These are surely critical issues for the Northern Ireland Economy moving forward and in the author's opinion ones that require urgent focus and attention.

NIC ICTU

Special Fiscal Incentives for Northern Ireland
The Trade Union Position

1. Over recent months there has been pressure, mainly from business interests, for special fiscal incentives for Northern Ireland (NI). If such incentives were to be achieved without strings they would be most welcome provided there was a realistic prospect of realising agreed aims. The purpose of this paper is to explore whether there are realistic possibilities.

Economic aims

2. The aim of special concessions has to be seen both in the wider context and in the specific context of NI. The wider context is set by what is called the Lisbon Strategy of the European Union. In 2000 the heads of government of the European Union agreed that by 2010 the European Union should be the world's most dynamic and competitive knowledge-based economy, consistent with social cohesion and sustainable development. Thus the Strategy calls for a balanced development between three strands: economic growth, social cohesion and environmental sustainability.

3. In February 2006 the United Kingdom (UK) Government confirmed that it was committed to "raising the rate of UK productivity growth" and "as part of the wider objective of full employment in every region….increasing the employment rate".[1] Special fiscal incentives would be welcome if they achieved these key economic aims and were granted without adverse consequences. Earlier this year the Lisbon Strategy was refocused on growth and jobs.

4. This connection between growth and jobs is crucial, because for some business interests growth is sufficient in itself, even if it comes without jobs. For trade unions jobless growth is not a goal. For us growth is only a means to an end and not an end in itself. The test of any fiscal incentive must therefore be whether it is likely to lead to more and better jobs through economic growth.

5. The specific Northern Ireland context is set by the Economic Vision for Northern Ireland and published in February 2005. This Vision is given as follows: -

> *"Northern Ireland as a high value-added, highly-skilled, innovative and enterprising economy, which enables us to compete globally leading to greater wealth-creation and better employment opportunities for all".*[2]

1 *Overview of UK's National Strategic Reference Framework, Department of Trade and Industry, February 2006*

2 *Economic Vision for NI, Department of Enterprise, Trade and Investment, February 2006*

6. While this Vision may not be ideal from a trade union point of view, it does have the merit of sustaining the link between jobs and growth.

7. Unfortunately this link between jobs and growth is not maintained by Invest Northern Ireland in its key 2005-08 targets[3]. The Chief Executive is attributed as saying that its focus in on wealth creation and not job creation.[4] Dr. M. Maguire, then the Northern Ireland Chairperson of the Institute of Directors, expressed a similar view. In February 2006 he was reported to have said, "We need to spend less money on Invest NI jobs and more on support to companies trying to grow and develop".[5] Further pursuit of this inconsistency with overall government policy is outside the scope of this paper.

8. While it may be legitimate for business people to go for wealth-creation, to justify grants or advantageous tax arrangements, there has to be some return to the taxpayers as a whole, because what we are talking about is effectively a tax subsidy. According to the Industrial Development Authority for the Republic of Ireland (ROI) a firm based in the United States has to achieve an additional profit of 45% to compete with one based in the ROI to achieve the same distributable income.[6]

9. The importance of not being diverted from the focus on jobs is underlined by the policy of the UK government to increase the rate of employment for the UK as a whole to 80%, which is higher than the target of 70% set by the Lisbon Strategy. The aim is to reduce the number of people who remain economically inactive. Northern Ireland's employment rate is nearly 6% below the UK average. In addition over 40% of our unemployed are long term unemployed, compared with 20% for the UK as a whole.

10. In amplifying its Economic Vision statement, the government said that we must "ensure that economic growth is also environmentally and socially sustainable and balanced". The government went on to refer the policy of Targeting Social Need (TSN) so that disadvantaged areas would share in economic renewal. Consequently a further test of incentives might be whether they are socially sustainable and whether they further TSN. An environmental test may also be appropriate, but this is of secondary importance to trade unions. Further consideration of this aim is beyond the scope of this paper.

11. In its NI Economic Vision the government identifies four drivers. Of particular interest is the "skills" driver. According to the Government "increasing workforce skill levels are central to raising productivity, increasing competitiveness and improving the sustainability of employment". Consequently a further test of an incentive is the extent to which it will enhance the skills of the workforce.

12. The fiscal incentive that has been campaigned for most recently is to have our rate of corporation tax reduced from the 30% to the 12.5% rate, which, applies in the ROI. It has recently been advocated by the Industrial Task Force[7], led by Sir George Quigley, and has been taken up by a the "Better Deal and for Business Campaign" of the Belfast Telegraph.[8]

---

3 *Corporate Plan2005-08, Invest NI*

4 *Belfast Telegraph, 10 February 2006*

5 *Belfast Telegraph, 10 February 2006*

6 *Knowledge Is Our Nature, Industrial Develpoment Authority, July 2004*

7 *Report of Principal Outcomes of the Industrial Task Force, 2005*

8 *Belfast Telegraph, Business telegraph, 10 April 2006*

13. The main political parties have also taken up the cudgels recently. The Democratic Unionist Party has called her for the rate of corporation tax in Northern Ireland to be reduced to 10%. Sinn Fein is advocating a rate of 17.5% for both NI and the ROI. Both the Ulster Unionist Party and the Social Democratic and Labour Party appeared to be backing equalising the rate with the Irish Republic at 12.5%.

Range of tax concessions

14. Before the current campaign got underway the case for fiscal incentives was focused on enhanced tax credits. In 2001 the Milford group, headed by Dr Alan McKay, then of the Galen Holdings, proposed that there should be special tax allowances are for spending on research and development, on "enhanced labour training" and on marketing.[9] The proposal was that the tax allowance should be 3 times the amount actually spent on research and development, training and marketing. These special allowances would be in addition to existing allowances for expenditure on plant and machinery.

15. In 2003 the Ulster Society of Chartered Accountants (USCA) published proposals similar to those of the Milford Group.[10] The main difference from the Milford Group was the addition of spending on "product development" to the three Milford categories of research and development, training and marketing.

Effectiveness of tax concessions

16. This paper now examines in turn how each of the proposals for a lower rate of corporation tax and for special advantageous tax arrangements measure up to the aims set out in paragraphs 4 and 11 above. The claims made by their advocates are also examined.

17. One of the chief claims of made for reducing our rate of corporation tax is that the lower-rate in the ROI has produced extraordinary growth in wealth and jobs. The analysis below casts considerable doubt on this claim

18. The comparison with the ROI overlooks the undoubted contribution which the various partnership programmes, agreed between the trade unions, employers and governments stretching back over 20 years, have made to the success of the ROI economy.

19. Other factors, which have also been overlooked, leading to the success of the ROI economy, include the availability of a workforce skilled in modern needs, the support for research and development and investment in public infrastructure.

20. The experience of the ROI has not been consistent when it comes to tax incentives. Between 1956 and 1980 the ROI had a zero rate of corporation tax on manufactured exports, but according to Charlie Mc Creevy, the European Union Commissioner for the Internal Market and former Irish Finance Minister, it did not generate any conspicuous economic success.[11]

9 *Proposals to Reinforce the Expansion of Successful Business in NI, Milford Group. August 2001*

10 *Fiscal Incentives: A Step Change in the NI Economy, USCA, 2003*

11 *E! Sharp Magazine, December 2005*

On another occasion Charlie Mc Creevy is reported to have said, "You won't have economic success solely by taxation".[12]

21. A prime consideration, that is also passed over is the fact that the current rate of corporation tax in the ROI was introduced only three ago and after its economy began to take off. In the ROI employment started growing to an unprecedented extent in 1989 when the rate of corporation tax was 47%. High GNP growth rates for the ROI began in 1994 when the rate of corporation tax was 40%.[13] Immediately prior to 2003 there was a special low rate of 10% for exports and a higher general rate of 28%. Clearly the gestation period of the so-called "Celtic Tiger" was beyond the framework of the current corporation tax regime in the ROI.

22. There is no guarantee that a lower rate of corporation tax will lead to more jobs or better quality jobs. There was a period in the Irish Republic when there was virtually jobless growth. In the period when employment grew substantially tax reductions contributed to significant increases in real take-home pay.[14] The "tax wedge" is the difference between what it costs an employer to employ someone and what that person takes home. The reduction in the tax wedge contributed to employment growth in the ROI, especially for the lower paid. According to the National Competitiveness Council for the ROI, "the low labour tax wedge ….now represents a competitive advantage for Ireland".[15] This approach to tax reductions does therefore deserve further consideration.

23. International comparisons also cast doubt on the effectiveness of a reduced rate of corporation tax. The Organisation for Economic Co-operation and Development has said, "It is clear from the literature review….that the effects of taxes on economic performance are ambiguous in some areas and unsettled and controversial in others".[16]

24. For states like the United Kingdom the headline rate of corporation tax does not project a true picture. A number of studies have revealed the "effective rate" of corporation tax in the UK is much lower than the headline rate of 30%. According to the Institute of Fiscal Studies the effective rate is 24%, compared to 11% in the ROI. The CD Howe Institute estimates the effective rates at 22% for the UK and at 14% for the ROI. It is of some significance that the Howe Institute estimates that the USA has an effective rate of 38% and that Japan's is 34%, both of which are much higher than the UK rate.

25. For the purpose of the international comparisons Eurostat calculates an "implicit tax rate" based on the amount of tax actually collected as a proportion of the amount on which tax is due. In the case of the UK this reveals that while the statutory rate of corporation tax is 30%, the implicit rate is only 14.9%. Unfortunately a comparable figure for the ROI is not readily available, but other international comparisons show that the UK is the member state of the European Union with the lowest implicit rate of corporation tax of the old 15 member states. Even when the 10 new member states, which joined the European Union in 2004, are taken into account the UK is still substantially below the average of 19.2% across all 25 current

12 *Irish Times, 11 September 2004*

13 *Tax Cuts Did Not Create The Celtic Tiger, Irish Congress of Trade Unions, Autumn 2004*

14 *Tax Cuts Did Not Create The Celtic Tiger, Irish Congress of Trade Unions, Autumn 2004*

15 *The Competitiveness Challenge, National Competitiveness Council, Autumn 2005*

16 *Taxation and Economic Performance, Organisation for Economic Co-operation and Development*

members states.[17] The net point is that the actual level of taxation, as opposed to the theoretical rate in the UK, is at the lowest levels in the in the member states of the European Union.

26. Another way of looking at burden of taxation is to compare how much taxation is raised from corporation tax. In the UK in 2003 7.6% of total taxation came from corporation tax, whereas in the Irish Republic the corresponding figure was 12.8%. Across all the 25 member states of the European Union the figure was 7.9%.

27. A more meaningful comparison is the proportion of Gross Domestic Product (GDP) taken in corporation tax. In the UK in 2003 corporation tax was 2.7% of GDP, in the ROI it was 3.8% and across the 25 European Union states it averaged 3.0%.

28. The figures quoted in paragraphs 24 to 27 above indicate that in the UK as compared to the ROI and the European Union as a whole, the burden of taxation does not rest unduly on companies. Indeed it may be possible to argue that the burden falls on fairly on the personal taxpayer, but this issue is beyond scoped of this paper. Another interesting revelation of these figures is that a lower headline rate does not necessarily lead to lower actual taxation.

29. Lowering the rate of corporation tax for all companies is not likely to stimulate all of them to contribute to enhanced economic growth. This concession will be given to a number of companies, which would provide no public benefit in response to a significant change in public policy and possibly only inflate their profits. The concerns about a blanket concession arise from our experience in NI with regional and local rates. For many decades manufacturing industry, along with a few other trades, have had 100% exemption from paying rates, while services, including tradeable services, and other commercial businesses have been obliged to pay them in full. However this concession, which is fairly unique on the European scene, has not lead to significantly higher contribution to economic development by companies exempt from rates. This raises the question of whether a more targeted approach would be better. The targeted approach suggested by the Milford group is therefore examined in the next section of this paper.

Special tax allowances

30. The first target suggested by the Milford Group and the Ulster Society of Chartered Accountants was spending on research and development. Research has been commissioned from Professor R. Harris on the case for a higher rate of tax credit for research and development in NI. The case for this target is fairly clear. In Northern Ireland business expenditure on research and development is only 0.5% of GDP, as compared with 1.5% for the UK as a whole. For the Lisbon Strategy the European Union has a target of 3.0%, but this includes expenditure by the public sector on research and development. (The Lisbon target is for 2/3rds of expenditure on research and development to be business expenditure). Nevertheless NI lags far behind.

31. However the emerging research of Professor Harris is showing that the uptake of current tax credits for research and development in NI is surprisingly low. While this research indicates that a more substantial research and development tax credit is worth considering, it also makes the point that the cost to business of research and development can also be lowered

17 *Structure of Taxation in the European Union, European Commission, 2005 edition*

by a more extensive use of grants and that this needs to be considered. The latter point is further considered in paragraphs 35 to 39 below, but the research does conclude that an enhanced research development tax credit on its own is unlikely to change the general lack of a research and development culture in NI. If this latter conclusion is correct it does raise the question of whether even a substantially enhanced rate of tax credit for research and development is likely to make a material difference to the state of our economy.

32. The next target for special tax concessions suggested by the Milford group was “enhanced labour training”, while the Ulster Society of Chartered Accountants in their proposals referred to “training/retraining”. Given the skills deficiency referred to in paragraph 11 above this choice of target is to be endorsed. However the target would have to be refined. For example it is notable that the Milford Group specified “enhanced” labour training. This highlights the question as to whether the concession should be given solely for additional training and not for training, which would have taken place in the absence of any concession. As a higher percentage of the economically inactive are without qualifications compared with other regions of the UK, there is a question as to whether the concession should be skewed in favour of companies, which take on the economically inactive or the long term unemployed. The difficulty of tailoring a tax concession to meet this specific target raises the question of whether grants would not be a more appropriate weapon. As stated earlier the case for grants v. fiscal incentives is dealt with below.

33. The third target identified by both the Milford group and the USCA was “marketing”. The connection between spending on marketing and jobs and growth is not readily apparent. Increased spending on advertising might drive up sales and might call for greater production, which in turn might lead to more jobs. However spending on marketing of itself does not deal with the structural imbalance in the NI economy. In particular it would not lead to the “high value-added, highly-skilled, innovative and the enterprising economy” set out in the Economic Vision.[18] For this reason trade unions should not support this proposal, unless it is refined in a way that makes a direct connection with the growth and jobs.

34. The USCA went on to identify a fourth target of “product development”. The distinction between this factor and the “development” strand in research and development is not clear. It is therefore suggested that this target is superfluous, as it should be covered by a research and development.

Grants v. tax incentives

35. As indicated in paragraphs we now turn to the case for tax concessions as opposed to grants. The first consideration has been already referred to in paragraph 31 above. It is that grants can be tailored more readily to specific targets so that the impact of public funds is maximised rather than a blunderbuss approach, which scatters funds far and wide with little specific return.

36. In developing this argument for maximizing the impact of public funds, it is evident that another disadvantage of the fiscal incentives approach is that its scope is usually very wide and the benefits will accrue to firms which do little or nothing to drive forward the economic development of NI.

18 *See paragraph 5 above*

37. Another important consideration that has been overlooked is the fact that grants would be within the control of local administration, subject to European rules on state aid, whereas fiscal incentives would be under the control of the Treasury in London. Even in a situation of direct rule more influence could be exercised on the level and scope of grants, than attempting to influence the Treasury in London on whether a concession should continue for NI or its level or scope.

38. An argument advanced for tax concessions, as opposed to grants, is that the former are not within the ambit of the European Union, whilst the latter are. Both the UK and the ROI have been most forceful in resisting any attempts by other member states to bring taxation within the competence of the European Union. It is however questionable as to how long these two states can successfully sustain their opposition. Despite the strong reservations of the UK and the ROI, a measure of agreement has been reached at the European Union to harmonise the tax base across the EU for the purpose of company taxation.

39. There are also signs of increasing tension between a number of member states over what they regard as unfair competition using corporate tax rates, or "tax dumping" as some term it. One of the reasons why the ROI decided to introduce a uniform rate of corporation tax at 12.5% in 2003 was because the European Commission was unhappy with the regime that concede a lower rate of 10% to manufacturing industry. The regime was considered to be discriminatory and therefore unfair.

40. Austria reduced its corporate tax rate this year from 34% to 25%, provoking a spat with Germany. At a meeting of EU Finance Ministers in April 2006, it has been reported that the Austrian and German Ministers traded jibes over Austria's bid to attract German investors with low tax.[19]

41. It is a policy of the European Trade Union Confederation that tax should come within the competence of the European Union, so that tax burdens can be equalised across the EU. The majority view in the EU is that competition should be between private companies on a commercial grounds and competition should not be between member states on the grounds of tax concessions. The recent success of Marks and Spencer in the European Court against the UK Inland Revenue on offsetting losses outside the UK for tax purposes, illustrates the increasing influence of the European Union on tax matters. A Portuguese case referred to in paragraph 46 below reinforces this point.

Treasury resistance

42. In choosing the tax concession route one has to overcome the difficulty of persuading the Treasury of the uniqueness of the NI case. For example a recent analysis of the Scottish situation concluded: -

> *"The main challenge is a relatively low productivity. In part this reflects Scotland's low-rate all-new firm formation".*[20]

19 *New Europe, 9-15 April 2006*

20 *Smart Successful Scotland, 2006*

43. The Scottish publication referred to in the previous paragraph goes on to refer to Scotland's poor performance in research and development. In other words the Scottish experience seems to be similar in certain major respects to that of NI. All of this raises the question of how a UK Government could sell politically a lesser rate of corporation tax for NI and denying it to Scotland or the North East of England.

44. We would also have to counter the Treasury's concern about "transfer pricing". This is the situation were companies can manipulate their internal pricing systems to spirit profits and losses from an operation in one country to an operation another country. In 2003 two economists in Amsterdam, Eric Barthelsman and Paul Beetsom, were able to show that "value-added" fell in response to tax rises in certain countries, but the numbers on the payroll in those countries remained largely on changed.[21] In other words economic activity appeared to be unchanged, but the value of this activity changed significantly. Consequently the Treasury would be concerned that companies would inflate their profits in NI if we had a special tax concession. Overall UK tax revenue could fall. Of special significance to NI is the fact that our employment levels in such companies would be unlikely to raise significantly.

45. The case for tax concessions is sometimes based on the higher cost of operating in Northern Ireland because of higher energy and transport prices. Leaving aside solely for the purposes of this paper, the fact that these costs are also borne by employees and other members of the public, a tax concession may not be the most efficient way of mitigating these costs. For example higher energy costs could be offset by a reduction in rates for business investing in energy efficiency schemes for their plants and buildings. Such an approach to exemption, wholly or partially, from rates could contribute more effectively to economic progress.

46. The Treasury attitude is also likely to be coloured by a recent European Court of Justice ruling. In a case involving Portugal, the Court found that it was permissible for a member state to have different tax rates for each region of a state, but only if no other forms of state aid were provided in the region. In other words if NI were to obtain a different rate of corporation tax, it would cast doubt on whether Invest NI or other public bodies could continue to provide grants. Not only does this case reinforce the need for a full debate on the pros and cons of fiscal incentives v. grants, referred to in paragraph 35 above, but it also underlines the point made in paragraph 38 above about the increasing influence of the European dimension in tax matters.

47. Inviting the Treasury to review our tax system may also lead to a review of our whole system of public finances. Our current arrangements are based on the premise that we will be funded through the Barnett Formula to provide the same level of public services as another parts of the UK, provided we are subject to the same tax regime as the rest of the UK. It appears to be on this basis that Treasury have insisted on raising very substantially our local rates bills and on the introduction of water charges. Given this hardened attitude by the Treasury and the European Court ruling, referred to in paragraph 46 above, it must be questionable whether a reduction in corporation tax solely for Northern Ireland would be without any consequences for public expenditure. Eammon Duffy, a tax partner at KPMG, posed the question: -

21 *Why Pay More? Corporate Tax Avoidance Through Transfer Pricing, Journal of Public Economics, 2003*

> *"So could the outcome of the current request from the Northern Ireland business sector for a reduced corporate tax rate be at the price of reduced regional funding?"*[22]

48. In summary the main elements in the trade union position are: -

- Tax concessions should be part of a wider economic package (paragraph 17 to 20) and must not endanger other programmes of regional funding (paragraphs 46 and 47),
- Fiscal incentives must have a transparent likelihood of creating more and better jobs (paragraph 4), bearing in mind the case that a lower tax wedge could be a better means of creating more jobs for the lower paid (paragraph 22) and they should also lead to enhanced of the skills of the workforce (paragraph 11),
- A case exists for enhanced tax allowances for research and development (paragraphs 30 and 31) and for enhanced training (paragraph 32), but there is not a clear case for marketing (paragraph 33).

June 2006

22 *Belfast Telegraph, Business Telegraph, 30 January 2006*

Rural Development Council

Supporting Innovation of Rural Resources in Regional Economic Development

The Second Submission of the Rural Development Council to the Assembly Sub-group on the conomic challenges facing NI

Fiscal Measures and Education and Skills

Response in relation to the measures required to develop an integrated skills and education strategy capable of meeting the current and future needs of the economy and based on best practice elsewhere

Rural Development Council
Policy and Innovation Research Unit

Contact
Nick Mack
Director

Tel 028 867 66980
nmack@rdc.org.uk

Rural Development Council

Introduction

This submission largely focuses on the opportunity to re-focus and improve the role and purpose of education and training in support of economic development in rural areas. We recognise that many training , education and fiscal considerations will apply equally well to economic development in any part of the region or in any sector. Our submission seeks to specialise in and to clarify for the sub group in what ways 'Rural' economic development deserves particular considerations in designing an integrated strategy.

We offer some particular comments on fiscal measures first, and then explain some of the recent developments around training and education support operating in rural areas which we suggest should be taken into account in designing an integrated education and training strategy. In particular, we strongly recommend that such a strategy is 'rural proofed' not solely in terms of equity issues but also in ensuring the maximum benefit can be achieved for economic growth and sustainability from rural resources.

Fiscal Measures

From a fiscal perspective, the Single Rural fund 2007 – 12 will see a significant reduction in funding falling from some £280 million in the current programme to perhaps some £120 million in the coming one (negotiations still being ongoing). Yet emphasis is placed on rural development also helping to deliver the objectives of the Lisbon agenda for improved competitiveness and employment. Facilitating the realisation of rural assets in new forms of economic activity must take place through increased ownership by government and not through a dependency on EU funding programmes. It must be linked to a clear strategic understanding of the rural economic potential and see a coordinated approach encompassing DARD and DETI and DEL / DE. EU funds can continue to help test and demonstrate possible areas of development (as an action learning approach), but they cannot engineer the degree of re-structuring that is required unless backed up by mainstream policy programmes. Rural proofing should not be viewed as solely one of ensuring equity, but of ensuring good integration between rural development and mainstream development strategies.

We would advocate a move away from the use of grants as the only mechanism for encouraging change, and more resource being channelled through programme approaches which bring together fiscal and developmental support within localised area development strategies.

Rates relief for some rural businesses would also be welcome. RDC welcomes rate relief measures that would help support the rural economy and we recognise the challenges in avoiding displacement or deadweight. We are particularly concerned, however, with the recent decision not to take forward the Rural Rate Relief Scheme which operates elsewhere in the UK.

Essential rural services in Northern Ireland are coming under increasing pressure. Our experience of working with the rural retail sector would indicate higher costs associated with insurance and electricity than UK counterparts and this coupled with rates and the introduction of larger multiple stores to Northern Ireland are impacting on the sustainability of the local shop. Such services provide more than just the sale of goods and services they very often are the focal point for community activity, a place where people meet and feel safe.

Training and Education for Innovation in Rural Areas

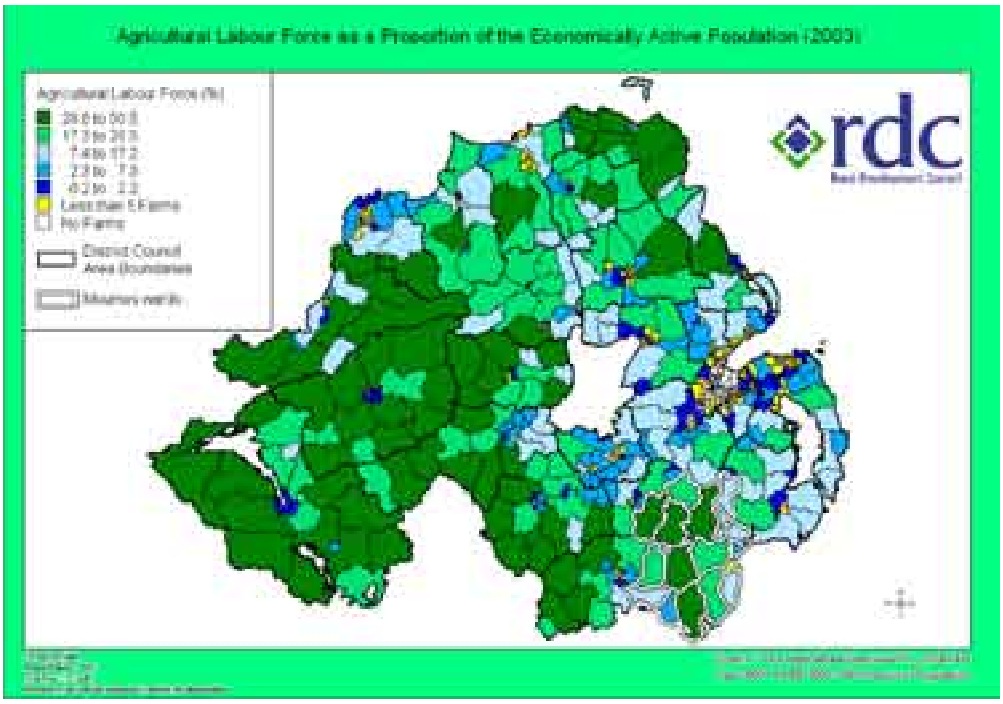
Rural areas are not immune from or irrelevant to the development of the knowledge economy and society. To connect rural to the knowledge economy more effectively and unlock its economic potential, improvements need to be made in the way by which innovation is diffused into local rural economic development, in a way appropriate to its sustainability.

80% of Northern Ireland is Rural. It represents a significant economic resource in the region which is currently mis-aligned with economic forces. We highlighted in our previous submission to the sub group that rural areas in a changing marketplace offer considerable scope for economic innovation drawing on natural, environmental and cultural resources. A case example is the significant growth in demand for organic food and also for local food schemes. Statistics on the extent of each are attached in Annex 1.

A concerted and positive signal from government for a creative re-take on rural enterprise is particularly important given the vulnerability of the agri-food industry in Northern Ireland. Whilst there is a body of farmers that can face up to the challenges of competing in global markets, coupled with an innovative food processing sector, at least 60% of farms are too small to support a full-time farmer, and although working as efficiently as possible, many farms (particularly in the beef suckler sector) make no money or effectively 'pay' to be farmers.

Dependency on Farming

Whilst farmers are only part of the rural population with a stake in rural economic development, they are a significant focus for appropriate structural change, particularly in more marginal areas (a sizable portion of the overall land area of Northern Ireland). The map below shows levels of dependency on farming for employment and household livelihoods. It includes full and part-time farming, spouses and family members employed on farms, and full, part-time and casual labour. Green areas are those where there is a higher level of dependency on farming and typically, a lower productivity from farming also.



The pattern shows different levels of dependency on agriculture from West to East, with particular dependency in the rural west, the south, and the north east. Areas where dependency on agriculture is high and productivity limited require a significant re-deployment of farm resources into local development.

Farmers often however lack confidence in the applicability of their farming skills outside of farming, or indeed lack qualifications and additional skills required for re-directing farm resources into other enterprises. Key to this re-deployment must be an appropriate and integrated programme of training support.

Stimulating innovation and enterprise in rural areas should be an objective of a balanced and sustainable approach to economic development in Northern Ireland. This means that a key focus for training and education for rural economic growth should also be individual entrepreneurs, micro-businesses and SMEs which characterise and fit into a sustainable rural economy.

A broader level of support for farm and non-farm individuals and businesses is also needed which relates to the local territory and its particular circumstances and opportunities. Working at an area level mirrors the concept of a 'learning region' or regions which is forming a key plank of regional development linkages to education and training elsewhere. A learning region approach is also relevant because whilst it is key that in rural – based development it is through local and small-scale initiatives that people can start to shape their own future, nevertheless this is best done in the context of a clear vision of the potential of a locality and through effective collaboration. .

We would advocate encouraging an integrated approach which links a strategic analysis of the development circumstances and opportunities of distinct rural sub regions within Northern Ireland (aligned with forthcoming Super Councils for example) with enterprise development and closely linked skills or educational development support.

The situation in summary, then, is that rural areas, given encouragement for entrepreneurship, often have both the problem and the solution to hand in using rural resources innovatively. To achieve a positive and innovative change process requires an appropriate (rural-proofed) approach to education and training.

Education and Training for Rural: Rural Proofing the Approach

We would suggest that a rural-proofing of education and training for economic growth should consider the following

1. That the strategy include provision for changing use of rural resources in recognising the need for an appropriate analysis of the necessary skills and associated educational materials and through a clear understanding of the strategic potential for rural economic development

2. That it ensures there will be ready access to education and skills support in rural areas (outreach, awareness, distance and access)

3. That the strategic approach is responsive to local development issues and directions whilst also bringing in fresh thinking from beyond the confines of a rural area? (rural areas have significant potential which needs to be understood on its own merits, however rural areas are often also isolated from new trends in technology or markets.)

4. That the strategy recognises and forges links with rural support structures now and emerging as part of future rural development programmes in order to integrate these with other training and education initiatives

Specifically, and with more general applicability, we would suggest strongly that

a) economic and social innovation is best fostered in local contexts through collaborative learning for action between those with a stake in their locality, a model receiving increasing recognition across Europe under the heading of 'The learning region'[1] The OECD, is also looking at the concept in aiming to better understand the role of higher education institutions' (HEI) in regional development and to provide the different regions in OECD countries with practical and policy guidance.

b) fiscal incentives (particularly grants-based ones) be tied into educational and training development programmes linking local strategic development with individual / individual business development needs

Skill Requirements in Rural Economic Development

Farm diversification in Northern Ireland has always lagged behind that of Scotland, RoI or England. Small farm size, high levels of debt and limited local markets have acted to inhibit diversification along with an ageing farm community. As far as possible, and underlining our recommendation for area approaches, we recommend skills programmes should aim at clusters of farms to diversify, and not depend on grant aid alone but use a combination of strategic interventions including

- Individual farm appraisals and signposting
- Encouragement of farm development groups as a central point for exploring and developing new integrated (multi-farm) enterprises
- Encouragement, in particular, of better links between farm and non-farm businesses for collaborative economic initiatives
- A grants support package to incentivise the process

A number of studies have recently begun to draw attention to the value of closer relationships between farming and local rural or territorial development as a model; for example, the development of 'local identities' based on awareness of distinctive local resources that can be exploited and marketed in novel ways can in turn encourage participation in local development and the enhancement of social capital in re-structuring marginal rural areas[2]

1 *See for example EU PASCAL Programme website http://r3l.euproject.net/go.cfm?PageId=3020,*

2 *Hannon and Curtin; Arkleton Trust Coordinated EU 'RESTRIM' research project (Re-structuring Marginal Rural Areas)*

Farmers are of course only part of the rural population who can offer entrepreneurial responses to economic change. Other key areas for skills development which can foster a 'rural' enterprise include:

- Assisting companies to improve environmental performance/
- Reducing environmental impacts and cost.
- Encouraging sectoral development of companies operating in the energy, environmental goods and services sectors.
- Developing links between the business sector and the Further and Higher education sector (Third level institutions) and research bodies.
- Facilitating the business sector in maximising the benefits arising from the utilisation of ICT.
- Developing joint marketing of cultural and natural tourism opportunities
- Development and marketing of artisanal foods.

Taste England is actively promoting farm shops as a tourism feature;

"What better way to get a true taste of England than by paying a visit to one of England's many ***farm shops****. Today, there are over 3,000 farm shops scattered throughout England's beautiful countryside. Each of them gives the visitor a delightful opportunity to access* ***local, fresh*** *and* ***seasonal food*** *and* ***drink"***.

RDC recently implemented a Rural Retail support programme aimed at improving the marketing and business management skills of rural shopkeepers. A total of 125 participated in the scheme. To illustrate the training needs identified for rural retailers the training programme devised included:

- Stock Management and Control
- Managing People
- Recruitment and Selection
- Retail Marketing
- The Retailer and the Law
- ICT
- Maximising the Sales Delivery
- Health and Safety

Retail marketing and sales delivery emphasised layout plans and display, point of sale information, market research and product range development. The programme and its signposting of the potential of rural retailers as an asset has since been incorporated into the 2006 Organic Action Plan for Northern Ireland (see annex).

A key point is the need for a 'whole system approach' to training and education support for marshalling rural resources – local shopkeepers represent a stepping stone for the development of local food production and retail systems and each sector in the system needs to be provided with the right kind of training to ensure excellence throughout. Such a system then provides a foundation for the growth of larger scale enterprises which may develop export potential, and links into tourism development.

Institutional Innovation

In marshalling the more diffuse and inter-dependent resources and people in rural areas we would encourage approaches to skills and education which relate to coherent rural areas and which combine the skills development process with practical participatory evaluation of economic options.

Solving the challenge of a ‘rural’ education and training support which can operate at an area level or can fit with ongoing entrepreneurship can be informed by initiatives already taking place here or elsewhere in the EU. We offer three examples.

1. Rural Support

Training support in rural development has to a large extent focussed on community development, however two key additional support elements are worth highlighting in particular in relation to economic development.

a) The Rural College

In the early 90’s the Rural College was established with the specific aim of assisting community business development as a skills and support gap in rural development. The college has since shifted away from this specific form of support but is reviewing its future role at a time when DARD are withdrawing from funding community-development based courses. The approach of the college is one of practical, applied delivery of education and skills training, and includes a range of examples of where skills development has emerged as an outcome of a strategic plan. We suggest this model could offer an important template for an appropriate rural skills and education support. We would commend the model and experience the rural college has developed, and the collage itself, as a key ingredient in ensuring a rural approach to education and training

b) The Concept of Rural Observatories and Networks

The LEADER programme saw the establishment of both networks and observatories to assist in capturing and disseminating emerging best practice as a rolling training and development support.

The Wales Rural Observatory, for example, undertakes independent research and analysis on social and economic issues in rural Wales. It is funded by the Welsh Assembly Government to support evidence-based rural policy-making in Wales.

The Scottish Centre for Regeneration (SCR) helps build skills and expertise and share knowledge among those working in community regeneration. The model has broader relevence to support for rural economic development. Its roles, for example, include:

- Identifying what works and what doesn't work and supporting them to put this into practice including the skills needed and supporting them to obtain these.
- helping people and organisations to improve approaches to delivering and accessing local services and increasing access to jobs
- putting in place programmes that support improvements in partnership working, mainstreaming services, demonstrating impact, identifying effective practice; and improving linkages between development programmes.
- Managing the New Ideas Fund which helps to develop innovative approaches and ensure that the lessons learned are shared as widely as possible.
- Publishing 'How To' Guides and 'Learning Points' reports that share the lessons learned from programmes, research and evaluation.

Scottish Enterprise also has a specific Rural Group, the role of which is to ensure that Scottish Enterprise plans and develops vital responses to rural issues, in line with our overall strategy to build a "Smart Successful Scotland".

In the Republic of Ireland State support for indigenous firms shifted in the 90's from grants aiding capital investment toward efforts addressing deficiencies in a wide range of business functions, such as innovation, technological development, training, management, and marketing, but we have not been able to find evidence of a link being made between rural development through LEADER (and the LEADER network in the RoI) and this broader state support approach for indigenous business development. It would be important to ensure gaps in training support are not left open and we would recommend the linkages between rural development support and state support are carefully taken into consideration in a strategy for Northern Ireland.

The Rural Development Programme includes resources to establish a Rural Network which will have the particular job of monitoring developments, encouraging sharing of best practice and arranging training and development support. We recommend the sub group views this and the Rural College as resources providing to include within an overall strategy for education and training as a 'one stop shop' for rural not just within rural development but across government programmes and initiatives aimed at stimulating economic development in rural areas.

2. The ICBAN Third Sector Network

We would encourage an evaluation and development of the Third Sector Network model which has been taken forward by the Irish Cross-Border Area Network (ICBAN). The model has sought to establish a responsive R+D and training / mentoring support resource for local businesses linked to the Third Sector (FE colleges in particular)

As ICBAN put it; "There is potential for greater economic benefits for the whole area as a result of the joint co-operation in business ventures and common business activity. There is a substantial Higher Education resource in the area and joint activity could better inter-link with the business sector to generate greater innovation and expertise in SMEs".

The objectives of the Programme are to enhance innovative capacity in the ICBAN region and assist colleges in the ICBAN region become more business facing.

The programme achieves its objectives in a number of ways-

- Bursary scheme to assist organisations undertake innovative research - they must work with a college on this project
- Financial Support to undertake study visits to look at International Best practice and/or conduct innovative research.
- Signpost projects where they need support beyond the ICBAN programme
- Work with clusters
- Work with a network of colleges to look at areas where they can collaborate and meet the needs of industry;
- Conduct Visits internationally to look at best Practice methods adopted by Colleges to link to business.

By way of example:

- As a result of winning a bursary of €41,395 **Foodbureau.com** have linked with Sligo Institute of Technology; this partnership will develop a unique software system to allow users to complete and edit HACCP flow diagrams online. At the moment most HACCP (Hazard Analysis Critical Control Point) work is done manually.
- With a bursary equivalent of €10,000, The Tyrone **Furniture** Consortia have been working with Omagh College of Further Education to bring innovative methods into their existing operations thereby enhancing their competitiveness.
- **Functional Food** is a food that has added health or even medicinal qualities, eg probiotic drinks, cereals with added vitamins and spreads with omega oils. This initiative project aimed to enhance innovation capacity in the food sector through a four stage process of ‘Information Dissemination’, ‘Audits and Needs Analysis’, ‘People development’ and ‘Development Plans’ over eighteen months, facilitated by ICBAN and driven by Loughry College, the NI Centre for Food and Health (NICHE at UU Coleraine) and St Angela’s College Sligo. Twenty companies are receiving audits on their products, processes and business management. A series of master classes are open to these are other food businesses. Finally, a number of companies will be selected for a special award, to proceed to functional food development, either by product development or the adoption of new processes. The total award fund is € 80,000.

The key lessons in this model we would wish to highlight are the need

a) to encourage collaborative (cluster and network) approaches to the transfer of innovation learning and training

b) the value of bringing in new thinking from outside an area but then exploring how it can be applied within a rural area

c) the need to make third sector educational resources **responsive to** local development issues and directions

We would advocate programme approaches encouraging 'self help' and collaboration along with training for specific enterprise areas rather than depending only on individual grants to encourage change.

Further examples of a shift toward training for collaboration are reported from the Republic of Ireland – a case example is the Irish Productivity Centre (IPC), *"a limited liability company owned jointly by IBEC and the ICTU. It also receives some financial support from the State and for many years has successfully tendered for innovative projects from the European Union. Its structure and mandate ideally equips it to undertake innovative work in the field of State/enterprise partnerships. During the period 1992-94 it coordinated an important project on **"Training for social dialogue"**, in which seven organizations established a network, created joint management/union teams within each enterprise and embarked upon a series of projects, each designed to create or preserve employment through partnership efforts".*[3]

ICBAN suggest that too often, the potential for synergy is thwarted by failures of communication between regional stakeholders and HEIs, weak or unclear policy signals, and conflicting agendas in institutions. A clear strategic signal is need from government to encourage this form of collaborative approach.

3. Rural Schools as Village Development Centres

The problem of declining pupil numbers has put a new focus on the future of small schools in rural and urban areas. Small schools are, however, far more common in rural areas. Research by RDC into the options for sustainable small rural schools has highlighted the potential for schools to operate more broadly as local or village development centres.

The close relationship between Education and Development as 'Inseparable Siamese twins' was recently explored in detail through a European initiative under the title ERDE (European Rural Development through Education 2003 - 2005)[4] involving partners from Austria, Germany, Lithuania, Poland, Slovenia and the UK. The project examined how (adult) education should also "prepare rural people to earn a living from the knowledge based economy" particularly in "accessing village resources of formal and informal knowledge"

Suggestions include changing village schools into village development centres, revisiting and making better use of farm and cultural resources, using ICT for local economic development support and encouraging villages to be 'learning organisations'. The ERDE project envisages schools changing to work "not like a catapult sending the best students outside, rather, also working according to the needs of rural society"

In Sweden 'Enterprise in Schools' is a key focus for curriculum development; *"A clear distinction is made between traditional and enterprise training, where traditional training is described as reactionary and conservative, while enterprise training is described as pioneering and stimulating. The educational culture that has been found to be conducive to creating enterprising students is characterised by providing considerable scope for their*

3 *Strategic partnerships for training and development: The State/enterprise interface A. Coldrick December 1997*

4 *www.erde.lt*

own initiatives, encouragement of independence, and creative thoughts and actions. Project work is described as a natural element for both students and teachers. Problem-based learning with extensive integration of different subjects is also a natural element in such a culture" [5]. The goal of enterprise in schools in Sweden is in itself not to form a business or manufacture a product, but rather to create an educational context that promotes the students' enterprise. Nor is the intention to bring about changes overnight. Students of all ages are involved, and small children will also be given tools and conditions for developing their creativity and initiative; *"we can describe the projects' ambition to change the learning processes from "learning about" to "learning to be", which clearly indicates a kind of identity creation"*

This additional perspective from Sweden serves to illustrate and reinforce the case for a school today also working to help rural communities 're-imagine' their roles and options within a knowledge economy; helping to cultivate a creative and enterprising approach across children and adults which yet includes cognisance of a sense of identity.

Conclusions: Facilitating Change

The ideas suggested here are to some extent ambitious but their foundations have already been explored and expertise is available to continue to develop them. Rural Development, though often associated with community development, has put in place models and resources which can be used as part of a broader strategy for education and training for economic development which gets the best out of rural resources in the region.

It is important innovative and focussed approaches to education and training are signalled to underpin effective economic development in rural areas. Despite recognising the problem of an over-dependence on agriculture in many parts of Northern Ireland since the late 80's, the problem remains in the face of an increasingly sophisticated and educated public. Rural needs bringing into the knowledge economy and we hope the work of the sub group provides the opportunity to do so.

Annex: Statistics Illustrating the Growth in New Sectors as a Focus for Education, Training and Fiscal Support

In 2004, a confident review of the UK market for organic food ("The Action Plan To Develop Organic Food And Farming In England: Two Years On")[6], estimated that three-quarters of UK households bought some organic food, and that sales of organic food exceeded £1 billion. Since 2002, the proportion of UK organic food in the shops has increased significantly and at 2004 was 44% of total organic sales. This rate of increase is on course to reach the Government's target of 70% by 2010.

Northern Ireland however significantly lags behind this trend. In 2003 for example, 34% of agricultural land in England was organic, 7.5% in Wales, 57% in Scotland, but less than 1%

5 *http://education.curtin.edu.au/iier/qjer/qjer19/leffler.html*

6 *The action plan is produced by Defra and the Organic Action Plan Group, which includes representatives of the major supermarkets, food manufacturers, consumers, farmers, scientists, organic retailers and the Soil Association This document builds on the first organic action plan which was published in July 2002*

in Northern Ireland. 2005 statistics indicate increases in percentage land share in England and Wales, a slight reduction in Scotland, and an increase to around 1% in NI.

2005 organic production statistics from the Soil Association indicate that

- An estimated 8.9 million organic table birds were slaughtered in 2005, an increase of 55% since 2004
- Sales of organic milk exceed 200 million litres and are worth approximately £100 million a year
- In 2005, the farm gate value of organic meat and poultry was an estimated £129 million, an increase of 59% since 2004
- Sales of organic ales through the multiple retailers increased by more than 30% in 2005
- The retail market for prepared organic foods was worth £170-200 million in 2005
- The processed organic dairy market (butter, cheese, yogurt) was worth approximately £130 million in 2005

The UK market is expected to grow at around 9% in the next few years. The UK Government will aim to get more organic food into schools and hospitals, and will also encourage local organic food sales through farmers' markets and box schemes. In view of the mounting concern about the rapid growth in obesity and other diet-related illnesses, a priority is in exploring "how organic produce can contribute to the Government's public health agenda".

Local food outlets such as box schemes and farmers' markets have been recognised as viable alternatives to supermarkets and are another significant growth area estimated to be worth over 3 billion in a recent Mintel Survey (2005). Farmers' markets have begun to appear in many cities and towns throughout England. Today, there are over 350 in the UK and their popularity is indicative of people's changing attitudes towards food.

There is a clear message that farmers can capitalise on supplying local markets. The report notes the work the Soil Association has done to grow local markets, and particularly to improve access to organic food in disadvantaged communities. Emphasis is placed, rightly, on the need to look at how local supply networks can be developed and strengthened and we would highlight to the sub group this need for a 'joined up food chain approach to the enhancement of local food systems as an important strategic focus for local economic growth.

Sector Skills Development Agency

Jim Wells, MLA
Parliament Buildings
BELFAST
BT4 3XX

19 October 2006

Dear Mr Wells

Sub-Group on the Economic Challenges facing Northern Ireland

Thank you for the opportunity to provide evidence to the Economic Sub-group addressing the current sub-group's current terms of reference:

"To consider and report on the measures required to develop an integrated skills and education strategy capable of meeting the current and future needs of the economy and based on best practice elsewhere."

The enclosed document sets out our detailed response.

Yours faithfully

Laurence Downey
Northern Ireland Manager
Sector Skills Development Agency

Office address
QCA Northern Ireland
Glendinning House
6 Murray Street
Belfast BT1 6DN

Direct line: 028 9024 7101
Email: laurence.downey@ssda.org.uk

1 Introduction

Today's employers operate in an environment that demands new and constantly developing skills. That demand is driven by the need to be more competitive and to modernise our public services. Many employers in both the public and private sectors already invest significantly in the development of their current workforce, but they also expect that publicly funded provision and initiatives meet their requirements. However, many employers are concerned that the system seems dominated by colleges, training providers and their teaching staff rather than the consumer voice of employers and employees.

The Department for Education and Skills (DfES) published a policy statement entitled "Meeting the Sector Skills and Productivity Challenge" in 2001. The statement had been agreed by the Lifelong Learning Ministers in the four administrations across the UK. The policy statement set out the key principles to underpin the establishment of the Skills for Business network to give expression to the move from a "provider driven" to a "demand led" approach to providing skills development in the UK.

The purpose of this document is to give a progress report on the development of the Skills for Business network and the strategic role it is playing in the implementation of the Department for Employment and Learning (DEL) Skills Strategy. The document concludes with comments from recent research on lessons from abroad on developing sector based approaches to skills.

2 Skills for Business Network

The Skills for Business network aims to boost the productivity and profitability of the UK. This is being achieved by identifying and tackling skills gaps and shortages on a sector by sector basis. In short, trying to get "the right people with the right skills in the right place at the right time".

The Skills for Business network is made up of 25 Sector Skills Councils (SSCs) – each one is an employer-led, independent organisation. The Sector Skills Development Agency (SSDA) underpins the network and is responsible for funding, supporting and monitoring the SSCs.

Sector Skills Councils

At the heart of the Skills for Business network are 25 Sector Skills Councils (SSCs). Each SSC is an employer-led, independent organisation that covers a specific sector across the UK. The four key goals are:

- to reduce skills gaps and shortages
- improve productivity, business and public service performance

- increase opportunities to boost the skills and productivity of everyone in the sector's workforce
- improve learning supply including apprenticeships, higher education and National Occupational Standards (NOS).

SSCs provide employers with a unique forum to express the skills and productivity needs that are pertinent to their sector. By coming together as SSCs, employers have:

- greater dialogue with government and devolved administration departments across the UK
- greater impact on policies affecting skills and productivity
- increased influence with education and training partners
- substantial public investment.

All SSCs are licensed by the Secretary of State for Education and Skills, in consultation with Ministers in Scotland, Wales and Northern Ireland.

Together, the SSCs cover approximately 85 per cent of the UK workforce.

The process of assessing and licensing the 25 Sector Skills Councils was completed in late 2005.

The complete list of Sector Skills Councils is included as Annex 1.

Sector Skills Development Agency

The Sector Skills Development Agency (SSDA) is responsible for funding, supporting and monitoring the network of Sector Skills Councils (SSCs).

The SSDA is a non-departmental public body with its main base in South Yorkshire and representatives across the UK. The organisation is led by Chair **Margaret Salmon** and Chief Executive **Mark Fisher**, both of whom were appointed by the Secretary of State for Education and Skills.

An employer-led **Board** provides additional strategic support and advice. Bill McGinnis,

CBE, represents Northern Ireland on the SSDA Board.

In brief, the SSDA's responsibilities are to:

- fund, support and monitor the performance of SSCs
- ensure consistent, high-quality standards across the Skills for Business network
- ensure skills provision is designed to meet sector needs
- provide minimum cover for sectors without a SSC
- ensure generic skills are effectively covered in the work of the SSCs
- promote best practice sharing and bench-marking between sectors
- collate high quality labour market intelligence and to make this available via a website portal.

3 Sector Skills Agreements

The UK Government announced its intention to introduce Sector Skills Agreements (SSAs), to be delivered by the network of Sector Skills Councils (SSCs), in its Skills White Paper[1] in 2003.

Sector Skills Agreements (SSAs) are fundamentally altering the way skills are demanded, delivered and developed throughout the UK. They map out exactly what skills employers need their workforce to have and how these skills will be supplied – both now and in the future.

SSAs are facilitated by the network of Sector Skills Councils (SSCs), but are signed up to by everyone who supplies, funds and plans education and training.

Sector Skills Agreements (SSAs) are created by a process which involves a number of partners including employers through their Sector Skills Councils, trade associations and employer bodies, and organisations that supply and fund education and training.

There are five stages to the process:

Stage 1
A sophisticated assessment is made of each sector to determine short-term, medium-term and long-term skills needs and to map out the factors for change in the sector.

Stage 2
Current training provision across all levels is reviewed to measure its range, nature and employer relevance.

Stage 3
The main gaps and weaknesses in workforce development are analysed and priorities are agreed.

Stage 4
A review is conducted into the scope for collaborative action – engaging employers to invest in skills development to support improved business performance – and an assessment is made into what employers are likely to sign up to.

Stage 5
The final outcome is an agreement of how the SSC and employers will work with key funding partners to secure the necessary supply of training.

Sector Skills Agreements (SSAs) are brokered by Sector Skills Councils (SSCs) in partnership with:

- Sector Skills Development Agency (SSDA)

1 *Skills Strategy White Paper '21st Century Skills, Realising Our Potential', 2003*

- Department for Education and Skills
- Department for Trade and Industry
- Welsh Assembly Government
- Scottish Executive
- Department for Employment and Learning Northern Ireland

4 Progress in Northern Ireland

Establishing The Network

Although they are relatively new organisations all Sector Skills Councils have been operational in Northern Ireland for some time. Their profile is increasing with employers in their sectors and they are developing strong links with Northern Ireland Government departments, further and higher education, local private training providers, trade associations, employers and professional bodies.

Each Sector Training Council in Northern Ireland works closely with the relevant Sector Skills Council, for example:

Sector Skills Council	Sector Training Council
Skillset	Northern Ireland Film and Television Commission
SEMTA	Engineering Training Council (NI)
Improve	Food and Drink Training Council
e-skills uk	Momentum (ICT Trade Association)

Sector Skills Agreements

The Economic Vision for Northern Ireland identifies Skills as one of the key contributors to improving Northern Ireland's productivity and competitiveness in the global economy. A critical component within DEL's Skills Strategy is to develop a much better understanding of the current and future demand for skills. In DEL's vision *"Employers can anticipate and articulate their future skill needs; they are willing to invest in the skills of their employees and new recruits; and they find their skills needs are more easily met."*

"Across industry in Northern Ireland, the employer's voice will be heard as they work with their respective Sector Skills Councils (SSCs) to influence the design and content of vocational qualifications, determine training needs, and commit to collaborative action with other stakeholders through drawing up Sector Skills Agreements"

This quote by Angela Smith, MP, Minister for Employment and Learning, is taken from her Foreward to the "Success Through Skills – The Skills Strategy for Northern Ireland – A Programme for Implementation" publication launched on February 2006.

The network of Sector Skills Councils is clearly a critical component of the DEL Skills Strategy. In particular the development of robust high-quality Labour Market Information (LMI) through the development of Sector Skills Agreements is identified as the main evidence to underpin the development of policy in DEL.

Emerging DEL policy and implementation in professional and technical training, careers information, advice and guidance, further and higher education, management and leadership, and essential skills will place significant reliance on the LMI and expertise of Sector Skills Councils as the authoritative "voice of employers".

Other Northern Ireland Departments, such as DHSSPS, DARD, DETI, DCAL and DRD, are increasingly engaging with Sector Skills Councils to address skills issues relevant to their areas of responsibility.

All Sector Skills Councils are currently developing their Sector Skills Agreements in Northern Ireland. This probably represents the most comprehensive research ever undertaken locally to understand the needs of employers and employees across the economy including public services. Sector Skills Agreements for Skillset and SEMTA are already complete, Construction Skills and e-skills uk should complete by December 2006, and the remainder will be completed over the course of 2007.

Cross-Cutting Themes

Evidence emerging from Sector Skills Agreements confirms a number of themes which apply to all sectors to varying degrees.

Three important cross-cutting themes which have an important focus at present are:

- Management and Leadership
- Employability Skills – including essential skills and "softer skills" such as teamworking
- Migrant workers

Sector Skills Councils will be working with the relevant departments/agencies in Northern Ireland to support programmes in these areas.

5 International Best Practice

In a recent research report published by the Sector Skills Development Agency - SSDA Catalyst Issue 2 "Lessons from Abroad" – David Ashton, Emeritus Professor of Leicester University, Centre for Labour Market Studies, reviewed a range of countries that have developed sector-based approaches to raising employer demand for skills. National approaches to sector skills were reviewed in Australia, Canada, France, Germany, Netherlands, New Zealand, South Africa, Singapore, and USA.

Professor Ashton concluded that there is no single set of "best practices" that can be identified and transferred from one country to another. He concluded that the components of an effective sector skills approach included:

- Enabling employers to play a key role in identifying skill requirements and designing the competencies required.
- Securing the consent of employees by enabling the individual employee to gain recognition for their wider skills in the labour market. This is very effective where trades unions, professional organisations or employee representatives work closely with employers in the determination of skills needs.
- The use of financial incentives is maximised to influence the behaviour of employers towards skills development. For example, a number of countries use a system of levies, trainees wage subsidies and tax incentives.
- Government funding of Sector Skills Bodies needs to balance the requirement to be responsive to employer needs with the wider and long term objectives of the economy.
- At least some of the funds for public training provision are directed through employer-led Sector Skills Councils.
- The sector skills approach acknowledges and manages the tensions that may exist between the central or federal government and the nations or regions.

Professor Ashton's report considered what Governments can do to create a system that is responsive to employer demands and raises skills levels. The most important action is to ensure the component parts of the vocational education and training system (VET) are aligned and working together towards the same objectives with employers, with employee support, at the centre of the system. The other components include the flow of funding, the delivery of skills through the vocational education system, the vocational qualifications framework, financial incentives for training, the support of trades unions and the objectives of other relevant government agencies.

6 Conclusion

The DEL Skills Strategy supports the move to a "demand led system" of skills provision and places the Skills for Business network as the heart of achieving. This provides Sector Skills Councils with a strong policy context to support their activity in Northern Ireland. The development of Sector Skills Agreements will be a key driver in influencing the shape of future local training provision.

Sector Skills Councils are still relatively "young" organisations and more work needs to be done to raise awareness of their role with employers, representative bodies, training providers, and government. Critical to building on the good progress to date will be ensuring the Skills for Business network is fully resourced/funded in the future to deliver its key goals.

Annex 1 - List of Sector Skills Councils

Asset Skills
Sector: Property services, housing, cleaning services and facilities management.

Automotive Skills
Sector: The retail motor industry.

Cogent
Sector: Chemical, nuclear, oil and gas, petroleum and polymer industries.

ConstructionSkills
Sector: Construction

Creative & Cultural Skills
Sector: Advertising, crafts, cultural heritage, design, The Arts and music.

Energy & Utility Skills
Sector: Electricity, gas, waste management and water industries.

e-skills UK
Sector: Information technology, telecommunications and contact centres.

Financial Services Skills Council
Sector: Financial services industry.

GoSkills
Sector: Passenger transport.

Government Skills
Sector: Central Government.

Improve Ltd
Sector: Food and drink manufacturing and processing.

Lantra
Sector: Environmental and land-based industries.

Lifelong Learning UK
Sector: Employers who deliver and/or support the delivery of lifelong learning.

People 1st
Sector: Hospitality, leisure, travel and tourism.

Proskills UK
Sector: Process and manufacturing industries.

SEMTA
Sector: Science, engineering and manufacturing technologies.

Skillfast-UK
Sector: Apparel, footwear and textiles and related businesses industry.

Skills for Care and Development
Sector: Social care, children and young people.

Skills for Health
Sector: The health sector across the UK.

Skills for Justice **Sector**: Custodial care, community justice, court and prosecution services, policing and law enforcement.
Skills for Logistics **Sector**: Freight logistics industry.
SkillsActive **Sector**: Active leisure and learning.
Skillset **Sector**: Audio visual industries.
Skillsmart Retail **Sector**: Retail
SummitSkills **Sector**: Building services engineering.

University and College Union

University and College Union

475 Lisburn Road
Belfast
N Ireland BT9 7EZ
Telephone 02890 665501
Fax 02890 669225
Email belfast@ucu.org.uk

Northern Ireland Assembly - Sub-group on economic challenges

Terms of Reference - **"To consider and report on the measures required to develop an integrated skills and education strategy capable of meeting the current and future needs of the economy and based upon best practice elsewhere."**

A comment by the University and College Union (UCU). 175.06

1. UCU is disappointed we did not have the opportunity to appear before the Sub-group. That opportunity was not realised as developments at St.Andrews overtook events. We nonetheless welcome the invitation of the Committee to make a written submission and hope you will find our comments of value.

2, The subject under examination has been visited many times by many governmental organisations over the years. Indeed the Assembly in its examination of the further education sector has gathered important evidence which prompted government to take forward a major review of further education and to develop policy in respect of its role in meeting the skills agenda. Other important work in this area has been carried out by the former Training and Employment Agency, the Learning and Skills Advisory Body, the New Deal Task Force as well as the Skills Task Force.

3. UCU has no doubt that in its work the sub-group will have paid careful attention to past government policies and those currently under way. We are also of the view that, whilst much can be learned from examining practice in other economies, because of historical development which have set structures in a unique way in our society, only general pointers may be acquired, and that our needs are best met by understanding indigenous factors and shaping policies and proposals to meet our specific needs.

4. In 2004 the then Minister Barry Gardiner proposed a Skills Strategy for Northern Ireland which was followed by a Programme for Implementation issued by his successor Angela Smith MP. There is much in those proposals relating to aspirations and priorities for our society which have to be taken seriously and which if addressed, will greatly enhance the level of skills in the Northern Ireland workforce. We would urge the Committee not to lose

sight of those proposals. Below we set out some of the areas where we believe a difference of approach is required.

5. The Minister proposed to establish "for the first time, an over-arching framework for the development of skills". NATFHE (as UCU was then) felt this was nothing new – the view that skills needs be articulated and that mechanisms be put in place to ensure that the skills needs of employers and individuals are matched by providers. Past efforts have had some success but overall strategies have not been successful due to the lack of central co-ordination and direction.

6. The Minister proposed that the Skills Task Force should develop a regional framework for employment and skills action through a number of workforce development forums. UCU does not believe that approach will be any more successful than what has gone before. It is our view that co-ordinated implementation of a strategy can only be achieved through a mechanism such as a Learning and Skills Council (which apply in England) with strategic and executive powers similar to those which apply to such bodies elsewhere in the UK.

7. Government has taken a step in that direction with its proposal to establish an Education and Skills Authority. This is welcome, however at present the proposed Authority is set squarely within the Department of Education with the post-school education and training sectors falling under the responsibility of the Department of Employment and Learning. If the concept of an Education and Skills Authority is to have relevance it must embrace all those interests and providers who contribute to the education and skills agenda . That would include the further education colleges and the universities as well as employers and training organisations. It is out view that our community would be better served by having a single government department which has authority in respect of al providers in the field.

   The imminent changes within the 16-19 education requires a cohesive and co-ordinated approach linking mainstream post primary and post 16 providers to ensure vocational , academic and personal development enables individuals to reach their potential in the economy.

8. UCU is also of the view that the principle of voluntarism with regard to training and workforce development - which is explicit in current government policy - has proven not to be successful particularly in an economy dominated by small to medium sized enterprises (SMEs). The expectation held by many employers that training is an optional add-on to be entered into only when finance is available from the public purse must be overcome. We feel there is a case for a return to a system of training levy applied to all employers to fund training and workforce development as determined by Sector Skills Councils constituted upon a statutory basis for operation.

9. Government has stated "a central value of the strategy is that it is demand driven by the needs of the economy". This raises three major issues. Firstly government makes much of the thrust of globalisation and labour mobility and little of the need for traditional skills within the economy. It is our view that real and substantial demand exists and will continue to exist for many traditional craft occupations particularly in construction, engineering and agriculture and that training capacity and infrastructure must be upgraded to meet such needs. Secondly the "needs of the economy" are seen in effect as a snap-shot of the present. There

is little scope therein for speculative training with a view to attracting new and developing industry or commerce or of initiating training developments prior to industrial location to this area. Inward investment will not be attracted where there is perceived to be a lag between plant installation and the ability of the workforce to make it fully operational and efficient in a short space of time. UCU believes that there is a need to have a workforce with a high level of generic skills who can easily adapt to changes in technology and production methods. Thirdly government strategies are focussed primarily upon the private sector. In Northern Ireland our economy is heavily reliant upon the public sector. The needs for education and skills development apply to that sector as much as to the private sector. The thrust of government policy has largely been to ignore this fact and to target resources and policies at promoting development of the private sector.

10. Thus "the needs of the economy" have to be articulated across the spectrum of economic activity. The use of labour market information and research will help - however a multi-agency approach involving government, INI, the further and higher education sectors and local authorities will also be necessary. The engagement of the trade union movement is essential to that purpose. Such an approach in our view must also have a cross-border dimension.

11. Government has already identified an under-supply of persons qualified at technician level. We believe that applies as much to the public sector as to the private sector. Yet there is little by way of suggestions from government - beyond a reference to an unspecified expansion in the number of foundation degrees - as to how that issue is to be tackled. In order to meet demands for skills training across the economy, further and higher institutions must have some idea as to the numbers involved, the areas of the curriculum to be developed and their own staffing requirements. Whilst it is recognised that government has put substantial additional resources into further education since 1998 little of that has actually gone into the teaching process - it has largely been used by colleges to build up reserves, thereby diverting massive sums from useful social purposes, or put into administration. At the same time the pay of college lecturers has fallen compared to other sectors of education and comparable industrial groups. The sector is no longer seen as attractive to well qualified persons with industrial/commercial experience who can bring modern and relevant expertise into the teaching profession. Colleges do have recruitment problems in key industrial areas and many lecturers are leaving the sector for better opportunities elsewhere. The sector does have serious problems of low morale and work-related stress brought about by continual re-organisations and curriculum "initiatives". The sector has also been beset by a long running dispute over the issue of pay parity with teachers in schools. A resolution to that issue must be found otherwise the restructuring of the sector currently under way will be bedevilled by poor relations and lack of goodwill.

12. Government objectives regarding up-skilling of the workforce will not be met if it continues to ignore the genuine concerns of what is a key group of employees central to the delivery of its policy. Those charged with the responsibility of leading the further education sector must be supported by government to reverse the decline in lecturers pay compared to other sectors and to modernise pay structures in line with the Horisk report of March 2000.

13. In her "Programme for Implementation " Angela Smith almost in a passing reference states a key target the need for government "in consultation with the HE sector and employers,

develop a policy for higher level skills and the enhancement of student employability". The Higher Education sector is a major player in developing the skills agenda. The notion that universities are academic ivory towers belies the reality that vast areas of their course delivery is at the highest level of vocational activity in producing trained specialists for engineering and science as well as highly skilled practicioners in medicine, health care and other professions which impact upon the lives of all of our citizens. The H E sector must be a central participant in the leadership of any skills development strategy. The introduction of higher fees in higher education will seriously impact on part time programmes designed to raise levels in professional and technical skills. This will impact on the widening participation agenda across Northern Ireland.

14. The government's skills strategy has several policy strands flowing from it. We refer to three of those strands in particular and provide detailed comment in the form of appendicies in respect of two.

15. Central to skills strategy is Further Education Means Business - a policy involving significant restructuring of the sector into area based colleges and a change in the focus of colleges towards economic needs. DEL currently is engaged in a consultation exercise regarding policies for implementation. UCU is highly critical of those policies for reasons we set out in detail in the attached Appendix 1.

16. A second element of the strategy involves Essential Skills training. The International Adult Literacy Survey of the late 1990s identified around 50% of the workforce in Northern Ireland as having the lowest, or second lowest, levels of literacy and numeracy. By way of response government established its Essential Skills Strategy which sought to have 18,500 persons having attained a qualification in essential skills by 2007. Starting from a base of 100 having such a qualification in 2003, government has made progress, however the scale of provision goes nowhere near meeting the needs of this society. Significant additional resources will be required if government is to bring about real change in upskilling this large section of the workforce. There is a need to provide free education support for all persons irrespective of age to achieve at least a level 2 qualification. Whilst welcoming the last few years investment in the training of a professional workforce to deliver literacy and numeracy skills in the post compulsory sector this funding is under threat at the end of this academic year. There are still shortages of skilled staff in terms of staff development or recruitment of new staff. Central funding and co-ordination would ensure the needs of individuals are met.

17. A third major plank in the strategy is the restructuring of Jobskills into a new scheme for Professional and Technical Training. Having been heavily criticised by the Public Accounts Committee of Parliament, government in Northern Ireland has proposed a major overhaul of training provision. Government's proposals will fail because of its insistence that the bulk of trainees will have employee status. Their proposals will also cause confusion as to the status of apprentice training and the currency or qualifications attained. We have made a detailed critique of the proposals which are attached as Appendix 2.

18. A forth major element of an integrated education and skills strategy involves reform of the 14 – 19 curriculum. A significant start has been made with the introduction of the Vocational Enhancement Programme with its structured links between schools and the FE sector. This programme has been a success to date however from 2007 funding for the project will be

re-organised and placed solely under the control of schools. UCU believe this programme must be progressed in partnership arrangements between schools and FE colleges where meeting the needs of the students are the primary consideration. We fear that the proposed funding arrangement will result in budget considerations becoming the primary driver. This programme is consistent with the proposals of the Costello Report and provides an excellent opportunity for the sharing of resources. UCU believes the potential for this important project would be maximised under a single government department for education and skills.

19. Other aspects of the Skills Strategy which require implementation include the development of an independent all-age Careers Information, Advice and Guidance strategy. Government was to have produced such a strategy by October 2006 however it is yet to appear. Crucial also is the need to reform vocational qualifications to a credit based framework of qualifications. For many years government has talked and written of the need for such a development however such a system remains only an aspiration. Government has proposed such a framework for the end of 2010. It is important that remains an objective. A further major aspect of a skills development strategy is the need to develop a menu of provision for those furthest from the labour market because of a range of barriers such as homelessness, addiction, ex-offender etc progress towards integration into the workforce.

20. In many respects government has already articulated many of the issues to be addressed and the actions to be taken. Our concern is that government's approach to this important area is highly centralised and is characterised by a deep mistrust of those outside of a cadre of civil service mandarins. For a skills strategy to flourish it must have the acceptance and consent of those it seeks to engage otherwise they will not participate. It must be founded on a consensus with the governed and be based upon challenging but nonetheless realistic objectives which interests can buy into and to which they can contribute their particular skills and expertise for the greater good.

Appendix 1.

Further Education Means Business
Draft Policy Proposals issued by the Department of Employment and Learning

Comment by the University and College Lecturers Union.

The Department has titled its consultation document "Draft Proposals". Not many people believe that. Although nominally in a consultation period, college principals across the sector are acting on the measures stated in the document – they clearly see this as set policy. Secondly consultation means listening to, and seeking to accommodate other views – few we have spoken to have confidence that views returned to DEL will result in any change to the directives already stated.

There is a large volume of words in the policy document; whilst UCU makes comment on the broad aspects of the policy direction, there are many aspects therein that we do not comment upon - it should not be assumed that a failure to comment on a specific policy implies agreement by UCU.

UCU believes the policies stated are calculated to fundamentally change the nature of further education in Northern Ireland from a publicly funded education service offering a wide range of courses, delivered locally and which offers second chance opportunities to thousands of our citizens, to one which is centrally directed by government officials with the primary objective of meeting the needs of private sector industry. UCU has always recognised the importance of further education to enhancing skills and raising the qualifications of those in work – the record of colleges in that regard is beyond dispute – but we regard the wider social and educational role played by colleges as being of no less importance. The thrust of the policies stated by DEL will be to strip out the latter and to re-position colleges into an agency role subservient to the whims of private sector employers.

DEL's policies have at their core the notion that private sector employers have articulated and clearly specified training goals in respect of their workforce and that the route to being able to compete in the global economy lies in harnessing post school education and training to meeting those goals. These policies are based upon a pipe-dream far removed from the reality of the Northern Ireland economy.

The vision that most employers - large and small - will become vibrant and active participants of sector skills councils and lay before those who deliver education and training, a menu of their training needs, is fanciful. All the experience of the past thirty years shows that, whilst some employers do know, and can specify their training needs, the vast majority – particularly small employers – do not. Furthermore, there is little evidence - particularly in the case of small employers - that their priority is seeking to ensure high quality training for their employees. The overwhelming evidence is that unless education and training is available at no cost or inconvenience to them, small employers are unlikely to permit their employees to use such services. (UCU and its predecessor NATFHE have long argued that faced with such ingrained attitudes there is a case for government to re-establish a training levy on all employers.)

DEL itself is not confident of such employer engagement - why else would it rely upon the "Skills Expert Group" to do the thinking for employers and to drive Workforce Development Fora and Sector Skills Councils, which in turn will drive FE colleges. Who are these people on the Skills Expert Group? What is their record of achievement? On what basis can the citizens of Northern Ireland be confident that these anonymous maestros will have the foresight and leadership qualities to direct further and higher education to a future bright with prosperity and enlightenment? Does local democracy have any role in this vision for the future? Will community engagement and meeting local educational needs fit into any of this?

It is unrealistic to think that the Skills Expert Group or Sector Skills Councils or Workforce Development Fora can forecast labour markets with the precision DEL seems to expect. Planning has an important role, however it detracts from flexibility in meeting emerging or unanticipated needs. As envisaged, these policies will require a degree of micro management for civil servants reminiscent of a soviet style command approach. That will not work for a sector situated in a market economy dominated by small employers and a public sector which also has to meet a social need.

Having set its strategic direction, DEL proposes implementation by setting out four inter-related policies. DEL is careful to state the areas of curriculum delivery to be excluded from the exercise. What it does not state is that those areas together constitute a sizeable element of overall provision. How these curriculum areas are to be managed and accommodated where the remainder of the work is controlled in a departmental straight-jacket, remains to be disclosed by DEL.

Underpinning the policy directives is a seismic shift from the present college autonomy to one where the Department is to micro-manage the sector through its approval control over College Development Plans and the courses which are to receive funded delivery. Under these proposals the role of Governing Bodies is emasculated and college Directors will be surrounded by direction by DEL officials. How many civil servants will be required to scrutinise CDPs? What is their expertise in delivering teaching and learning? Why is it assumed that they have the expertise to make correct decisions rather than college staff?

Government's role should be to set overall objectives for the sector and to have in place systems to monitor accountability. Thereafter government should trust college staff to get on with the job of educating students. The model proposed by DEL will result in an ever increasing raft of performance indicators and counters to watch every bean. Educating students is relegated to a consequence.

Section 3 of the document - "Support to Employers" - creates the impression that hitherto the sector has been totally lacking in that role. That impression belies the truth. The FE sector is at the forefront of meeting the education and training needs of the workforce. If that were not the case why would many thousands of adults in employment use the colleges for career and workplace development every year. Whoever wrote the section knows little of what is done by colleges or of the contribution made by hundreds of lecturers who deliver a first class service. Nowhere in the document is there any reference to the available evidence documenting what the colleges actually do. Instead the author moves on the basis of impressions gleaned from the baseless whinging of some sectional interests hostile to the FE sector and who would continue in the same vein even when the record states otherwise. Check the evidence found by the Education and Training Inspectorate.

The author continuing, by inference suggests that colleges do not ensure "an effective response to employers needs". That is not true. Underneath such is usually an attack on lecturers and their terms of employment - a less than disguised aspect of this agenda. Those who are prone to such harpings would do well to make themselves familiar with the workload of college lecturers and the true nature of their engagement with, and commitment towards, their students. Lecturers have previously met such attacks and shown them to be false.

Elsewhere in this section the DEL's vision for the subservient role of the colleges is stated explicitly – colleges "will provide the secretarial support for the WDF in its sub-region". (Will this be a free service or at full cost recovery?) In addition colleges are to provide out of their budgets a wide range of consultancy services to employers without any consideration of matters such as patents or intellectual property rights. (Has anyone asked the lecturers how this is to be done?)

This subservience is compounded in the enhanced role to be afforded to ANIC – an organisation which hitherto has a less than impressive record of demonstrated leadership for the sector. To place ANIC at the hub of relationships between colleges, foreign investors, Invest NI and indigenous business is to add an unnecessary layer of bureaucracy which will do little to enhance the responsiveness of the sector. If ANIC is to have such a central role it will require substantial investment in skills and expertise beyond what currently exists in that organisation. How is that to be funded?

UCU sees the concept of Industry Recognised Centres of Excellence as consistent with the enhanced role given to industry in its relationship with the FE sector. Time and application will tell if the height to which the bar has been raised in respect of recognition criteria is realistic or not. In setting such lofty criteria there is a danger that DEL is condemning the sector to failure from the outset.

Section 4 of the document considers the curriculum offer to be laid on by colleges. Again the priority is for colleges to focus on skills areas as identified by the Expert Skills Group. The funding arrangement for level 1 provision in priority skills areas is yet to be determined. It is clear however, that unless any provision falls within those priority skills areas or subject to external regulation, there will be no funding from DEL. This will force colleges to shed a major aspect of provision which hitherto has been aimed at assisting those who are furthest from the labour market or who have special educational or social needs. This policy will seriously worsen community education services. The capping of such provision to 10% of a college's totally funded enrolments is a damaging and prescriptive measure which will hit the poorest and most vulnerable learners in this society.

The Department leaves open at this time its plans for the delivery of academic "A" levels and GCSE courses in the FE sector. Over the past decade such areas of work have been deliberately run down by the Department - it will come as no surprise if such is to reduce further. The fact that colleges have made such provision in response to a strong student and parental lobby is ignored – if DEL removes such provision from the curriculum menu of colleges it will be a further retrenchment from wider community engagement. Furthermore the distinction DEL makes between "academic" and "vocational" is baseless – all qualifications are of assistance in career and professional development.

The proposals are explicit that only those courses in priority skills areas are to attract funding. The converse of this is that some 80,000 students (mainly adults) taking so called non-vocational courses are likely to face the loss of low cost accessible education close to home. The teachers who service those courses are likely to lose their jobs. Colleges will lose the showcase aspect of this service to thousands of mature adults as well as their goodwill. Another community service is being cut.

Section 5 of the document seeks to privatise a major section of learning currently delivered by colleges. This has also been long trailed. The evidence underpinning this policy direction DEL happily admits is "uncorroborated", furthermore the Department states "it is not possible to conclude that outsourcing FE college provision to non-statutory providers….would widen learner access" - yet it decides to take that route anyway. Fermanagh College took such a route in the recent past - the Deloitte and Touche Report (August 2006) shows where such cavalier relations can lead.

To cover its back the Department puts responsibility on colleges to ensure that those organisations to whom they outsource work meet all minimum requirements. Furthermore the colleges have to meet the costs of setting up such arrangements whilst the private sector can reap any rewards. DEL's approach here will hit a large range of courses in community education that provide opportunities for people livening in areas of multiple deprivation and social exclusion. Those communities need support from dedicated and trained, specialist and professional educators – they will be poorly served by anything less. Tutors with as yet non-defined LLUK qualifications, have nothing like the qualifications and teaching experience of existing college lecturers. Access provision must remain central to the mission of further education and be delivered by qualified college lecturers in response to a public need.

Section 6 of the document reveals a new approach to the funding of colleges. We accept the current system has its faults however the new system far being a distributive mechanism is a control mechanism and an instrument to cut expenditure. The divisor used for relating part-time student hours to full-time equivalent is likely to become a norm for teaching hours. Our fear is that if 450 hours of study only will be funded by colleges, this will have the effect of reducing tuition time to students to 15 hours per week for 30 weeks in the year.

No educational argument is advanced to justify the selection of the figure of 450 hours and there is little explanation as to why that figure has been selected. Indeed the purpose of its selection is less than clear in the document. This must be addressed. A decision with such important consequences warrants justification supplemented by evidence to support the argument. Teachers know well that such constraints will make it impossible for large numbers of students in FE to reach their attainment targets.

FE students generally enter the system with lower levels of attainment than those who go on the university at 18; the value added in FE is their pathway to higher education and/or employment and career advancement. However most vocational courses for these young people require tuition and support well beyond 450 hours - and that must be funded. If tuition time is reduced to 450 hours for a full-time student it will seriously damage the future educational prospects of large number of students. It is also likely to spawn an 11+ style unregulated private tuition industry for the post 16 sector. Funding per student in FE should be no less than that afforded to students in schools. Students in further education should not be subjected to a second class system with a lesser educational experience that a similar student undertaking the same level of educational experience in a grammar school or sixth form college. The other tinkerings with the formulaic approach to funding pale into insignificance against prospect of this cut in funding of tuition time and the devastating consequences that will have for the educational welfare of large numbers of further education students.

In summary UCU see these proposals as consistent with the FE Means Business agenda – an agenda about cuts in public expenditure and contraction of a public service. Furthermore these proposals are concerned with centralising decision-making regarding the provision of public sector further education and placing it in a role subservient to the whims of the latest industry fashion. It is far from an agenda which seeks to promote lifelong learning or one which seeks to educate our citizens – of all ages – to have the skills to cope with life's challenges, as well as those they will meet in employment, in a rational and reflective manner or to take pleasure in the joy of learning for its own sake.

Ref.160.06

Appendix 2

DEL Consultation
Training for Success: Professional and Technical Training

A comment on the Department of Employment and Learning's Consultation Document by the University and College Union.

Introduction.

The Committee of Public Accounts of the House of Commons described the Department of Employment and Learning's Jobskills programme as **"one of the worst-run programmes that this Committee has examined in recent years"**. The Committee noted **"a quite astonishing catalogue of failures and control weaknesses, all of which pointed to a disturbing level of complacency within the Department**".

For years trade unions and other bodies had voiced their concerns regarding the lack of quality and accountability in DEL's stewardship of the Jobskills programme. Perhaps in the light of what has been a monumental failure there is a chance that on this occasion our views will not be so lightly dismissed.

UCU views "Training for Success" as something of a panic reaction by caned civil servants to put distance between themselves and the expenditure of half a billion pounds for what was considered poor value for money by the Public Accounts Committee.

The introduction to the Consultation Document argues that **"the education landscape in Northern Ireland today is significantly different to that in ….1995**" as a result of further education reform and the implementation of the Post primary Review. It considers this to be a primary reason for the new proposals. The difference referred to is far from clear. As yet - apart from tentative developments in the form of the vocational enhancement programme - little has changed in FE or in the pattern of young persons moving into employment or higher education.

The proposals are based at best upon a guess as to the likely shape of relationships between schools and post school institutions and employment opportunities. There is little in the document by way of statistical evidence relating to patterns for progression for young persons at post -16, demographic trends for the groups at issue, youth unemployment or those staying on in full-time education. DEL's Jobskills statistical information at 31st Oct.2003 shows over 15,000 participants in the programme. There is little evidence that there has been a significant decline in the numbers likely to continue to avail of the programme.

It is true that unemployment has fallen in recent years. Precisely how this trend impacts upon the groups covered by Jobskills however is far from clear. Such persons were not seen as unemployed in the first instance. There is no evidence presented by DEL to support the view that employment opportunities are sufficiently buoyant so as to facilitate the vast majority of those, who is past years would have entered the Jobskills Access or Traineeships (over 9,000 annually), will now enter the employment market as paid employees and apprentices.

Any training provider will give masses of evidence as to the difficulties in securing job placements for one or two days a week for such young people – at no cost to an employer. It will take a quantum leap both in terms of employers attitudes and employment opportunities for the groups at issue for the numbers concerned to move in the short term to employed status. For DEL to expect that employers will readily employ considerable numbers of these trainees and pay industry rates or at worst the minimum wage is aspirational in the extreme.

Industry trends also show that those areas where apprenticeships had traditionally been an important route to higher level skills - such as in craft trades and engineering - continue in decline and indeed that the shortfall in skills, where they exist, are not being addressed by employers training for the future, but by the recruitment of migrant workers. UCU believes the Department's strategy will prove to be fundamentally flawed from the outset unless it reconsiders its mandatory requirement for employed status at level 2.

Response to DEL's Questions

Q1. **What is your view of the Draft Principles?**

A. Firstly the dropping of the Jobskills title is welcomed. The principles of flexibility and individuality are important however employers and providers of training will for reasons of cost inevitably insist that time is not without limit – That being so there is a need for a government steer regarding the expected duration of any programme. UCU also supports progression and a qualifications framework and measures to ensure quality and control standards – the mistakes of the past must not be repeated.

Just as important as principles is the outworking of the scheme. The completion (success) rates for Modern Apprenticeships under Jobskills at around 40% was low compared with the 65 -70% success rates in countries such as Germany, France or Denmark. The revised scheme will only have credibility when it can demonstrate similar levels of achievement.

In England the Adult Learning Inspectorate has criticised the highly variable quality of provision commenting "an apprentice's chance of receiving a good training, a decent preparation for a career, is largely determined by which sector they enter" (ALI Annual Report 2003). The same can be said for Northern Ireland. Whilst a number of larger employers have a excellent track record in their treatment of apprentices trade unions and others have been critical of abuses in approach where employers – particularly SMEs - have failed to pay industry rates or honour contractual agreements; where young persons have been viewed as a source of cheap labour performing tasks which could be described as anything other than training; where abuses of health safety and welfare standards and the frequent denial or obstruction of day release education requirements have been widespread. Quality assurance must mean that abuse will not be tolerated and that any employer not fully complying with the rights of trainees will be removed from participating in any training programme.

Q2. Are there any improvements or other cross-cutting issues which should be addressed?

A. We have a concern regarding the role of Sector Skills Councils. Only a small number of Sector Skills Councils in Northern Ireland are worthy of the title and have the wherewithal to set industry standards. These tend to be associated with larger employers who themselves have had a traditional commitment to high quality training. These are the exceptions. Most SSCs have a long way to travel both in terms of having credibility to act on behalf of a sector of industry and in having the commitment of employers. In an economy dominated by small employers the likelihood of establishing common industry standards on a voluntary basis in the short and medium term is low. **There is a case for government, acting with social partners and specialist providers of education and training to take a lead in determining the curriculum where industry is unable to deliver**.

Q3. **What is your view of the proposed range of flexible new provision?**

Q4. **Do you agree that the emphasis should be on apprenticeships?**

Q5. **Do you agree that there is merit in introducing a specific Level 2 apprenticeship?**

Q6. **Do you agree that employer engagement is central to a new ear of training provision?**

A. The opportunity to take part in pre-apprentice training is welcomed. This however needs to be placed on a proper footing so as to ensure that young people have real experience of working in industry. Collaborative arrangements between schools and FE colleges and other participants must be on the basis of a partnership of equals. The FE sector with its historic links to business and industry coupled with the industrial experience of its lecturing staff must be a key participant in the determination of curriculum developments in this area.

The concept of a two tier apprenticeship is problematic. The introduction of a level 2 apprenticeship will be confusing to employers, young people and their parents. It will undermine the traditional concept of an apprenticeship as a route to highly skilled employment and career progression into professional qualifications and higher education. It will establish the vocational/academic debate into a new area in employment. The Level 2 element of the programme should not be classified as an “apprenticeship”. UCU supports progression from level 2 into an apprenticeship at Level 3 but we are of the view that the high currency value placed the “apprenticeship” title and understood by all should not be diluted.

The “addressing barriers to employment” section is predicated upon the notion that numbers will be relatively small. We accept that will be the case for those with personal barriers to overcome. The real barrier for a large number of young people with lower educational attainment however will be accessing employment - currently the numbers in the Jobskills programme who do not have employee status stands at over 9,000. Employers have not sought to engage this group hitherto. The incentive offered to employers to employ young people at level 2 will not be attractive to them and in many cases the jobs are simply not there. No proposals exist for this group of young people. Many of these will be resistant to continuing on at school or to entering full-time further education. What alternative opportunities will be available for this group. This is a major gap in the Department’s strategy.

Q7. **Should contracts for Level 2 and Level 3 Apprenticeships be offered to industry recognised bodies/employers or to training organisations or both.**

A. The two options should be employed. Where there is a record of past commitment contracts for level 3 apprenticeships should be available to industry recognised bodies and employers. These do not exist in many of the Groups identified by DEL. Where such is the case contracts should be available to recognised training organisations with a proven record of achievement and who meet the quality assurance standards of the ETI.

Where level 2 trainees do have employed status contracts should be available to industry recognised bodies and employers subject to the concerns raised above. However where employed status is not available contracts should be available to recognised training organisations with a proven record of achievement and who meet the quality assurance standards of the ETI.

Q8. **Do you consider that training organisations who act solely as a Managing Agent should be able/unable to tender for occupational parties delivered by a third party.**

A. Such bodies engage in training schemes for the purpose of making a profit. Only those organisations who have a direct interest in the career development of trainees through employment or education should be involved.

Q9. What is your view of the proposed funding model?

Q10. Is the Proposed funding model too complicated ?

Q11. **How would you feel as an employer or a supplier operating under the proposed funding model?**

A. The funding structure is complex. It is also reinforces gender bias. The level of funding for those areas of employment usually accessible to females are funded to a much lesser extent than those usually accessible to males. How is this justified when apprentices in each group will work to a similar level of attainment in qualifications? Employers outside of Group 6 also will feel that their contribution to the social economy is valued less by government.

More information and estimates regarding the total amount government is prepared to allocated to the programme based upon anticipated numbers of participants would have helped. For example some indication of the expectations of government regarding the number of participants on the apprentice route, the personal development route and the non-NVQ based provision would have helped. It would also have been useful if this latter group are to be a continuing group or as is inferred those currently on programmes and who will merely see them out. A comparison between what is to be available and what was available under Jobskills would have set a useful context for comment. It would also have been helpful to know how the funding levels of particular groups have been determined.

There is frequently a suspicion that government initiatives may be designed to cut costs to the public purse. In the absence of a transparent statement of overall projected costs it is difficult to conclude otherwise. Firstly costs will be reduced if the vast majority of trainees are moved to employed status. Secondly it is intended to remove from trainees the current (and appallingly low training allowance) and replace it with means tested EMAs. For families with an income £25,000 + and whose son or daughter is unable to access employed status this will an increased financial burden to them.

In any event at £40 per week the Minimum Training Allowance is far too low and should be raised to the minimum available under the Job Seekers allowance. There is an issue here of age discrimination applied by government.

On a more positive note UCU welcome the recognition given to "distance travelled" by way of attainment. We believe however that no distinction should be made between the levels of payment at particular milestones.

The funding model could be considerably simplified and made fair by making all funding as at Group 6 for all schemes.

Q12. **What is your view of the proposal for revised travel arrangements?**

A. These are to be paid only to those on the Barriers to Employment option. They should be available to all trainees with non-employed status and they should include reimbursement of actual costs incurred.

Q13. **Do you agree EMAs should be extended to unwaged trainees.**

A. There is a danger that if this is made mandatory many young people will be forced to leave home and seek to live independently. For many it may not be in their best interests to live outside of a supportive family environment. There should be a change in social security regulations to permit a young person in training to receive the equivalent of the job seekers allowance for the duration of the programme without this impacting upon other family benefits.

Q14. **Do you agree that Level 2 and Level 3 Apprenticeship provision should be available to adults over the age of 25.**

A. Government is introducing legislation to prevent discrimination on grounds of age. All post-school age groups for employment should be treated equally in training opportunities. DEL's Equality Impact Asessment of 2004 has identified past policy as impacting adversely upon equality of opportunity.

Q15. **Is there merit in introducing a lower level upskilling initiative and in what circumstances?**

A. Yes. As well as there being a need to up-skill existing employees in many areas of employment a new and growing group of employees mainly from the New Accession States of the EU are entering the Northern Ireland workforce. There is a massive need for education and training in English as a Second or Other Language (ESOL). A new funding stream should be developed to cater for this need.

UUTech Ltd

18 September 2006

UUTech Ltd submission to the Northern Ireland Government Committee sub-group on economic challenges

> *"The measures required to develop an integrated skills and education strategy capable of meeting the current and future needs of the economy and based on best practice elsewhere"*

The starting point

It has been estimated that 98% of the firms on the island of Ireland employ fewer than 50 people. It seems improbable that this ratio will change radically in the short to medium term, but the statistic serves to illustrate the existing employer requirement from the education system, i.e. that the universities/higher education sector is expected to produce graduates capable of taking on the needs of small businesses, on the one hand, but increasingly, and more notably in the Republic of Ireland, to meet the needs of multinational businesses.

Needs of SMEs

While Northern Ireland's industrial base is dominated by small and medium-size enterprises (SMEs), the challenges in the market-place are often similar in nature to those confronting far larger players. Just as the biggest multinationals have been forced to shift their manufacturing strategies to respond to the emerging and increasingly influential manufacturing bases of China, India and other emerging industrial nations, so too have SMEs been buffeted by the global economy.

The radical restructuring of the global manufacturing economy over the past 15-20 years, accompanied by the rapid shift towards the "knowledge economy", has posed a dilemma for economies such as Northern Ireland, which have traditionally relied on high-quality manufacturing skills in the garment and textiles sector and in engineering to provide the base for the industrial economy.

Even with the advent of the "knowledge economy" it was possible for some countries to "trade up" the skills curve, but the international market for labour has never been as transparent and portable. China has moved up the value chain in a wide range of sectors, from electronics to pharmaceuticals, as Japan did from the 1970s, and as India is beginning to do now.

In order to survive and prosper it will be crucial for Northern Ireland to produce highly skilled and flexible workers, capable of “thinking on their feet”, and adding value where it may be more difficult for countries focusing on economies of scale alone to compete.

The specific needs of the SME sector need constant revision, and enough flexibility introduced into the education system to enable it to respond as quickly as practicable to changes in the market-place. While the core skills within disciplines such as engineering, chemistry, computer science and design will remain constant, the specific applications and refinements of these skills are constantly shifting. Engineers now need knowledge of nano-technology; industrial chemists need awareness of developments in bio-informatics; all fundamental research specialists need knowledge to convert ideas into products or useable material.

Needs of multinationals

The needs of multinationals cannot be simply stated. In certain cases the needs of multinational employers will be little different from SMEs, but they need many more staff to cope with their volumes.

The design-led multinationals such as NIKE, DELL, etc, are constantly revising their supply chains to reflect the optimal value for money available in the world. NIKE has shifted footwear production many times, from the US to Western Europe, to Asia and increasingly now to Eastern Europe. Margins determine the location of the manufacturing activities, and decisions are both clinical and quick. The pace at which the garment and textile industries on the island of Ireland were hollowed out is testament to this trend.

But there is a role for the so-called mature economies, and that is at the cutting edge of design and even manufacturing. The world’s biggest micro-chip manufacturer, INTEL, has invested more than £5 billion in the Republic of Ireland, and employs thousands of workers there. But it has already signalled an intention of seeking opportunities in Eastern Europe, and it is expected to build a new fab plant near Shanghai in China. So what does INTEL need/want from the island of Ireland?

Essentially, it wants the universities to grow PhDs. It offers little by way of collaborative research activity, but it is a prodigious employer of the highest available skills levels, which is the basis to the debate around “Fourth Level Education”, which is essentially the production of PhDs.

One programme which Northern Ireland can and should embark on without delay is to accelerate the output of PhDs from its universities. There is a demonstrable attraction for multinationals such as INTEL, SAP and other players in the global ICT sector, and a growing demand from the pharmaceutical sector as well.

Research and Development

While multinationals enter into collaborative research agreements with universities, and these can and should be the shop window for the skills available in Northern Ireland, there is scope to expand the range of companies interested in this capability.

By generating ground-breaking innovation and then marketing this capability professionally and assiduously, Northern Ireland has the ability to present itself as the source of uniquely skilled researchers. A combination of technology transfer by way of patent exploitation, and marketing of expertise through consultancy and other conventional knowledge transfer activities, will increase demand for the output of Northern Ireland universities.

Measures

- A strategic assessment of the capability and capacity of Northern Ireland educational institutions – universities and Further Education colleges – and an analysis of the core priorities of the market place are needed so that the needs of the market can be linked to the strategy for the tertiary institutions. What is the global demand for PhDs in the ICT sector? What proportion of these graduates is produced by Northern Ireland universities? What is the global demand for Fourth Level graduates in other sectors – medicine, bio-chemistry, nano-engineering, etc? What proportion of these graduates is Northern Ireland producing?
- Examine the options for cooperation between universities and FE colleges, linking fundamental research with manufacturing and implementation.
- In the absence of a fiscal policy attracting foreign direct investment (FDI) into Northern Ireland for tax reasons alone, introduce a programme or programmes to enhance the competitiveness of skilled graduates from the University and FE sectors, and prepare a plan to market these skills internationally?
- Each university and each FE college tends to take care of its own marketing and development strategies. There could/should be benefit in devising an overall marketing plan for Northern Ireland's tertiary and fourth-level education systems.

John Mulcahy
Director
UUTech Ltd

1st October 2006

Appendix 1

Section 2:
Research Papers

The impact of the Northern Ireland universities on economic development

The Current Economic Impact of the Northern Ireland Universities and Enhancing their Role in Future Economic Development

October 2006

1. Introduction

1.1 The economic impact and significance of a world class and competitive higher education sector is now well recognised. The contribution that universities can make to the development of both European, national and regional economies is identified and developed in a range of policy papers covering science and innovation and the development of globally competitive knowledge based economies. Universities are seen as a source of animation for economic development providing the highly trained and adaptable workforce to lead development of the knowledge based economy; providing a world class research base generating new knowledge to sustain future economic development and working closely with industry to utilise existing knowledge to produce innovative and competitive products and processes. The key UK policy papers are "Science and Innovation Investment Framework 2004 – 2014", (2004) and "Science and Innovation Investment Framework – the Next Steps, (2006). These papers build upon earlier policies and include the commitment of the UK government to move towards the European Union's 'Lisbon' target for increased investment in research and development to create a globally competitive European economy. The target set by the UK is an annual investment in research of 2.5% of GDP by 2014. These papers reinforce the pivotal role of universities in ensuring the country's future economic competitiveness.

1.2 Before exploring the impact of the NI universities it is appropriate to look at them as 'businesses' in their own right. Today higher education is a global business as students and their sponsors seek the best opportunities for education and training throughout the world. Companies source their research and development from world class groups and consortia and increasingly will outsource elements of their research. Thus the NI universities, like local companies, are competing in a global market for students, research funding and the recruitment of staff. Moreover this is an informed market with the UK providing national benchmarks for quality in both teaching and research that are recognised and referred to globally.

1.3 As global businesses working in NI, Queens University and the University of Ulster have a combined total annual expenditure of over £340M, of which some two thirds is salary. It is estimated[1] that for every 100 jobs in universities, at least 99 are created through multiplier or 'knock-on' effects in the community. The 2001 census indicates that in NI 10,666 people were employed in higher education and research, therefore some 10,500 other jobs were dependent upon the success of the universities. It is estimated that at least £80M annually flows into the local economy for building projects, goods and services. In addition, expenditure by students, some 50,000 full-time equivalents in total, of whom some 1,000 are international, contributes to a vibrant services sector and increases the availability of products, services and amenities in the region.

1.4 Universities UK (UUK) recently published a report entitled: 'The economic impact of UK higher education institutions'. This assessed the direct and indirect contribution that universities make to the UK economy. The report was produced by the University of Strathclyde (a full copy is available on the UUK website, http://bookshop.universitiesuk.ac.uk). Along with the report UUK released a modeling system to enable individual institutions to compute both their own impact on their region and on the UK economy as a whole.

1.5 The model uses Higher Education Statistics Agency (HESA) data on staff, students and finances to calculate the economic impact of an institution. This includes estimates of the economic activity generated in other sectors of the economy through multiplier, or 'knock-on' effects, of the expenditure of the institution, its staff and students.

1.6 The UUK findings show that UK universities are worth £45 billion to the UK economy (2005). This means that the HE sector is now a larger contributor to the economy than the pharmaceutical and aircraft industries and only slightly smaller than UK legal activities and auxiliary financial services.

1.7 Key findings from the UUK study are:

a. Higher Education Institutions (HEIs) are worth £45 billion to the UK economy.

b. Higher Education export earnings are worth about £3.5 billion.

c. For every £1 million of HEI output, a further £1.52 million is generated in other sectors.

d. HEIs directly employ more than 330,000 people, which equates to approximately 280,000 full time equivalent (fte) jobs, about 1.2% of total UK employment.

e. For every 100 university jobs a further 99 are created by knock-on effects.

1.8 The UUK 'Strathclyde Model' referred to in the introduction has been used for both universities using the latest available HESA data (2003-04). The results for the NI universities are consistent with the overall findings from the study and demonstrate the economic importance to the region of our HE institutions.

1.9 The economic impact of **the University of Ulster** is:

- A flow of 6,700 graduates from taught programmes and 190 PhDs each year to meet the needs of the professions, industry and commerce.

1 *Universities UK – The economic impact of UK universities*

- The University of Ulster activities generated over £356 million of output in the UK economy.
- This comprised the University's direct spend of £147 million along with £210 million of output generated in other industries.
- The University of Ulster is responsible for generating £23.25 million of export earnings.
- Approximately 2,512 jobs are created outside the institution in other UK industries.
- Through UUTech the university commercialises its research findings, creating wealth and employment. Eighteen spin-out companies have been formed and are at early stages in their business development. The four most successful companies to-date have attracted external investment of almost £30M and employ 45 people.
- Incubation services are provided by UUSRP for companies spinning out of the university or moving in to access the research expertise and facilities at Jordanstown, Coleraine and Magee. Employment in those companies stands at 250 with other companies who have 'graduated' from a campus base now providing employment nearby.

1.10 The economic impact of **Queen's University** is:

- A flow of 4,550 graduates from taught programmes and 250 PhDs each year to meet the needs of the professions, industry and commerce.
- Queen's activities generated over £466 million of output in the UK economy.
- This comprised the University's direct spend of £193 million along with £274 million of output generated in other industries.
- Queen's is responsible for generating £22.6 million of export earnings.
- Approximately 3,125 jobs are created outside the institution in other UK industries.
- Through QUBIS Limited the University has established a portfolio of 'spin-out' companies exploiting the University's intellectual property and 'know how'. The 50 QUBIS Ltd companies have a combined annual turnover of £66 million, almost all of which is export, and they employ more than 840 people. QUBIS Ltd has leveraged investment of more than £50 million from outside Northern Ireland to support the development of its companies.

1.11 It should be noted that the UUK model can only provide an overview of the impact of universities. A recent economic analysis of the impact of London South Bank University carried out by PriceWaterhouse Coopers looked in detail at the impact of that university on its region. The report indicated that the economic impact of the university on its region was more than six times its annual income. This was the first detailed analysis of its type and demonstrated that investment in higher education is a strong investment for the state and the students.

2. The Universities' Contribution to Economic Development

2.1 Traditionally universities have been seen as having two major roles in economic development, these roles being teaching – to provide a highly qualified, well trained and adaptable workforce;

and research – to provide new knowledge for future economic and social benefit. More recently it has been recognised that the universities have additional roles in the economic development process. These roles include the provision of a forum and networks providing effective contacts for all actors within the regional economy to facilitate and promote international competitiveness. Additionally there has been a significant recognition that universities should accept responsibility for encouraging and enabling technological innovation in industry and commerce. This knowledge and technology transfer role is now seen as the important 'third leg' of the universities' contribution to economic development, and financial support for this role is to become a permanent metric based funding stream for universities.

2.2 Thus the three principal roles of universities are:

- **Teaching** – the provision of a well trained and adaptable workforce for the future
- **Research** – the provision of a world class, globally connected research base
- **Innovation** – the provision of pro-active knowledge and technology transfer to industry and commerce

3. Teaching

3.1 There is no doubt that the most important contribution the universities make to the development of Northern Ireland's economy is the education and training of graduates and postgraduates. The universities provide education and training for more than 70% of Northern Ireland's school leavers that enter higher education. As can be seen from the following statistics the scale of this aspect of the universities' contribution is immense.

University	Graduates (Taught) Per Annum	PhDs pa	Total
University of Ulster	6,700	190	6,890
QUB	4,550	250	4,800
Total	11,250	440	11,690

3.2 In this way the universities provide the future professional engineers, doctors, nurses, scientists, managers and linguists that will take forward, lead and deliver an export focused knowledge based economy for Northern Ireland.

3.3 The universities' role in providing the graduates and postgraduates to meet current and future needs is complemented by their contribution to continuing professional development and technology updating, delivered through activities such as the Northern Ireland Technology Centre.

3.4 A focus on skills and employability has been explicit in the UK education and training policies in recent years. Within the UK and other developed economies there has been major concern regarding the decline in the number of young people studying science and technology subjects. Measures have been introduced in the UK to enhance science teaching in schools, to set targets for the proportion of school leavers studying science and to raise the stipend for postgraduate study.

3.5 To date the full impact of the drift away from science and technology is yet to have a major impact within Northern Ireland. However the combination of that trend, demographic change and the reduction of the unit of resource for teaching in the key science and engineering subjects are creating adverse pressures. Within the UK those pressures have seen the closure of chemistry, physics and engineering departments in universities. Action is needed to protect the key science subjects within Northern Ireland and that action must protect disciplines within the universities and promote science and engineering at all levels of education. The trend, well illustrated by a decline of 11.4% in A Level entries in Chemistry and 20.6% in A Level entries in Physics in the ten year period 1995/96 to 2004/05, must be reversed.

3.6 Within England the DfES, in collaboration with HEFCE, the Royal Academy of Engineering, the Institute of Physics, the Royal Society of Chemistry and the Institutes of Mathematics, has just announced a £18m initiative to promote science, engineering and mathematics in schools. Four pilot projects are planned that will bring exciting ‘hands on’ experience of science to school pupils. There is a need in Northern Ireland to monitor the potential drift from science and to keep in touch with pilot projects taking place in England.

3.7 To date the major thrust in respect of training has been at sub-degree level. To some extent that emphasis has reduced recognition of the importance of universities in providing the high technology skills necessary to lead, mobilise and drive the future, innovative, knowledge based economy. It is important that the work of the International Skills Expert Group and that of the proposed Education and Skills Authority recognise the full breadth of skill needs and the universities’ potential contribution to the implementation of programmes and actions that support development of a ‘skills pipeline’ to meet future needs.

3.8 Much work has been undertaken within the quality assurance process within the universities to ensure the ongoing relevance of the curriculum to current and future needs. The updating of the curriculum involves extensive consultation and cooperation with employers and with the professional bodies validating the relevant degree programmes.

3.9 In addition there has been a major initiative to incorporate entrepreneurship within all science, engineering and technology programmes at undergraduate and postgraduate level. This has been achieved through the Northern Ireland Centre for Entrepreneurship (NICENT). Since 2003/4, entrepreneurship education has been delivered to over 8,000 undergraduates in science, engineering and technology at the two universities with the undergraduates receiving a Certificate in Entrepreneurship Studies. At PhD level, entrepreneurship is now an embedded element of formal PhD training. This training is complemented by training at Post Doctoral level and the availability of programmes delivering business planning advice and support to academic staff.

3.10 Further funding is anticipated to extend the initiative to undergraduate students in the arts, humanities and social sciences disciplines.

3.11 Entrepreneurship education and training is complemented by an extensive programme of student placements into companies and related work experience schemes. These schemes provide experience and opportunities to more than 6,000 students each year.

3.12 The elimination of support for vocational postgraduate programmes from the Education and Library Boards has had a significant impact on the availability of high level skills to meet the needs of indigenous and foreign direct investment (FDI) companies. As a consequence many of the companies regarded as essential to the rebalancing of the economy are experiencing skill shortages. These high level skill shortages are particularly relevant in the ICT sector and, if not given urgent attention, may limit the ability of Northern Ireland to attract and retain jobs in that key sector.

3.13 Analysis undertaken by Momentum, the ICT trade body, in cooperation with Invest NI, has identified the opportunity for sustained growth in the software development sector in Northern Ireland. The assessment is that the industry is capable of generating an additional 900 jobs per year. To date the combined output of the universities and further education is less than 500 suitably skilled graduates per year. This will have the effect of slowing economic development or creating new high quality opportunities for migrant labour from Eastern Europe.

3.14 Similar evidence exists in respect to the bioscience industries in Northern Ireland. The local companies are unable to fulfil their need for suitably qualified graduates and postgraduates from Northern Ireland and are having to identify and recruit potential employees from outside Northern Ireland.

3.15 Concern has been expressed at the number of Northern Ireland school leavers that attend universities outside Northern Ireland and do not necessarily return to jobs within Northern Ireland. It should be recognised that there are positive aspects to such emigration as long as it is balanced by immigration. Indeed it is considered that a significant element in the economic regeneration of the Republic of Ireland has been the influx of past emigrants returning to the economy with significant managerial experience and skills. Unfortunately the current, limited availability of appropriate skilled jobs and career paths means that there is no balancing immigration.

3.16 Furthermore, many of the local SMEs have yet to realise the potential contribution that graduates can make to the future viability of their companies. There would be merit in considering support for schemes that will encourage more local SMEs to recognise the contribution that graduate employees could make to increasing their productivity and competitiveness. In this context, the development of proposals that support the employment of science and engineering graduates in local SMEs should be given priority.

3.17 In Northern Ireland, as in many other UK regions, the burden of economic inactivity must be tackled and various initiatives are in place aiming to improve knowledge and skills, e.g. by encouraging young people to stay at school. Universities, through their access agreements and associated programmes, reach out to communities that do not traditionally engage in higher education. This agenda is termed ‘widening participation’. Its objective is to ensure that HE opportunities are seen as within everyone’s reach and that a new generation never joins the ranks of ‘long-term unemployed’. The ‘Step Up’ initiative at UU, that recently was extended to Belfast from the North West where it has operated successfully for the past five years, is an exemplar within the UK of how universities an achieve this objective.

3.18 As indicated earlier, the universities also have a major role in updating professional and technical skills. Modern approaches to providing support for businesses intertwine traditional high quality pedagogy with research and knowledge/technology transfer. As these students are in paid employment their different needs are recognised. The focus is on meeting the needs of both the employer and the student. Business support programmes include MSc programmes delivered full-time or part-time, in blocks delivered at convenient locations or including e-learning components as well as the more traditional short courses and professional updating usually offered as part of a CPD programme.

4. Research

4.1 Central to a truly innovative economy is a strong, world class and globally connected science base. Innovation requires that, in addition to a 'skills pipeline', there is a 'technology pipeline'. Research today is inter and multi disciplinary and there is a recognition that future breakthroughs are likely to be at the interfaces between disciplines rather than within a single discipline. Thus the emphasis is on research partnerships and collaborations that bring together leading research groups and thus provide access to particular skills and resources to tackle complex problems. If Northern Ireland is to ensure that its companies are able to compete globally the research base needs to be strengthened to increase participation in these research partnerships and provide companies with access to world class research and the resulting technologies. Thus there needs to be an emphasis on the universities ensuring that their research is world class, internationally recognised and globally connected. A target for Northern Ireland should be to ensure that it has a university in the top 200 world universities and that in certain areas of research that university should be in the top 50 of the world's universities.

4.2 Within the UK system the RAE provides an internationally recognised benchmark of research quality. It is important in the next RAE that the new profiles recognise those areas of research within Northern Ireland that are internationally leading and that the resulting league tables place the Northern Ireland universities in leading positions within certain subject areas. NIHEC have already agreed that QR funding will be focused primarily on supporting research excellence as assessed by the RAE. There is a need to consider the extent to which early agreement on the principles of the QR funding formula might enable the universities to maximise their RAE results. This would ensure that the Northern Ireland universities were well recognised as centres of excellence within the globally accepted UK benchmarks for research excellence.

4.3 A recent paper on the challenges facing universities in Europe emphasised the need for such developments and attributed the success of the US research universities to having overcome this challenge. The paper highlighted the need for selectivity and competitiveness, stating "They (elite universities) cannot develop within a funding system which is primarily geared to regional policy or to general ideas of equality and fairness rather than to excellence'. The report went on to state 'If these conditions are not in place, top down efforts by government to create future global winners are destined to fail'.

4.4 The economic impact of universities' research within the national science base is well recognised. Deborah Wince-Smith, Chair of the US Council on Competitiveness, summed up the matter in the following way "The current success of the US economy is the result of 40 years investment in fundamental research".

4.5 Within the UK a recent analysis by the Treasury confirmed that in the past five years the value of university spin-out companies that were floated publicly was £1.6 billion. That figure includes the Queen's University spin-out company Andor Technology, which now employs more than 160 people. The view of the Treasury is that this represents a significant and acceptable return on the nation's investment in world class research in the universities.

4.6 It is also a fact that world class companies work closely with world class research universities. Thus if Northern Ireland is to improve its competitive position within the UK in terms of attracting the best companies to Northern Ireland, investment to develop and sustain world leading research in its universities is essential.

4.7 Evidence of the early impact of such investment in world class research in Northern Ireland can be demonstrated. In Queen's University there has been a major investment in cancer research and that investment has secured significant leverage in terms of additional funded research fellowships and external research income. Indeed the number of staff employed within the Queen's Centre for Cancer Research and Cell Biology has increased by more than 100 over the first three years and is projected to increase further over the next three years. UU's Biomedical Sciences Research Institute has exceeded by a comfortable margin the challenging targets for attracting external income that were set for it when SPUR funding was awarded (the Centre for Molecular Biosciences). Most of the income has led to the employment of top class scientists from around the world.

4.8 Developments in the Republic of Ireland have recognised the need to continue to expand the country's science base through investment in what is termed the fourth sector of education, i.e. the universities. Major investment is planned in the context of the universities' ongoing contribution to increasing the number of companies undertaking research and development and increasing the scale of that investment via new mechanisms for collaboration between industry and universities.

4.9 Levels of research expenditure within Northern Ireland are well below the current UK average which is in itself significantly below the Lisbon target. Research expenditure is divided into Business Expenditure on R&D (BERD) and Higher Education Expenditure on R&D (HERD). Currently BERD in Northern Ireland is 40% of the UK average and amounts to some £125 million. The initial challenge for the Northern Ireland economy is how that annual investment by business can be increased by more than £180 million to the UK average. The longer term challenge is to increase that investment still further to the 2.5% of GDP target in 2014 set by the UK Government. To achieve that target arising from the EU Lisbon Agreement, Northern Ireland business will need to increase annual investment in R&D by a further £120 million.

4.10 Movement towards these targets will require significant action by the universities. In its first report the Lambert Review of University Business interaction noted that in Northern Ireland 'demand from the private sector for the kind of expertise that universities have to offer is weak and universities are important actors in what is, essentially, a supply side, public sector, innovation strategy'. Thus the universities have a major role in creating a technology push to transfer technology to local companies. That process will require action both to strengthen the university research base and to increase the number of trained researchers to work with and for companies as BERD expands. The Republic of Ireland's investment in its fourth sector research capability and capacity is expected to increase the scale of BERD from its current annual level of £700 million to more than £1.6 billion by 2013. There is acceptance that a transformational change of this scale will be driven by a transformational investment in the science base within the universities.

4.11 As might be expected in an economy dominated by SMEs, and a sectoral distribution with a strong emphasis on those sectors with low investment in research, the Northern Ireland universities have accepted the challenge of creating a technology push. HERD expenditure within Northern Ireland amounts to some £135 million. It should be recognised that this is at a lower level than would be expected were Northern Ireland investing at the average level for the UK. Indeed Northern Ireland should be aiming for HERD expenditure in excess of £200 million per year. Unfortunately the low levels of BERD allow comparisons with other UK regions that might suggest HERD levels are sufficient. It is important that both BERD and HERD increase and that the role of HERD in facilitating increases in BERD is recognised and supported.

4.12 There is clear evidence from the UUK impact study that the universities' research programmes have a direct and beneficial impact on the Northern Ireland economy. In addition there is evidence that the research base of the universities and their consequential ability to produce highly trained graduates and postgraduates is an important factor in attracting knowledge based companies as foreign direct investors. The recent establishment of a Campus-based Engineering Centre by SAP is a prime example of research excellence and talent attracting global, knowledge based companies to Northern Ireland. Nortel and Seagate are two previous examples. It is clear from the experience in the Republic of Ireland that research activity within the universities has supported the embedding of FDI, increasing the number of high quality technology and R&D based jobs, and has had a significant 'spill over' effect in driving up BERD by almost 20% over the past two years.

4.13 Thus investment in strengthening the university research base is essential if BERD is to be increased. Investments in the appointment of key staff will bring world class researchers to Northern Ireland and attract external funding from the research councils, major charities and the EU Framework Programme, as well as creating strategic links with MNEs and leading research groups around the world. A selective investment programme of £20 million per year would be expected to increase the external research income of the universities by £30 million per year, creating at least 200 new high quality jobs.

4.14 The proposed investment would also be seen as facilitating the development of increased applied research to raise the levels of BERD within Northern Ireland. In particular it is expected that the focus will be on the opportunities for collaborative industry focused research and development through the EU Framework 7 Programme. Traditionally the EU research and development programme has created opportunities and support for industry led projects. However Northern Ireland's companies have not thus far taken full advantage of the EU Framework Programme. There is a need for the universities to utilise their North-South and other European university and company contacts to enable increased participation in Framework 7 by local companies.

4.15 At the same time additional investment is essential to strengthen the research training infrastructure of the universities, facilitating the training of additional postgraduate research students (PGRs). The expansion of postgraduate training in other UK regions over the past five years has been significant. The table below sets out the percentage increase in the number of postgraduate research students in the UK regions. It should be noted that action is being taken in other regions. The percentage increase in the number of full time PG students in Scotland over the period 2003/04 to 2004/05 was 6.6%. This has provided the opportunity for Scotland to market its bioscience strengths on the basis that its universities have 18 % of the UK life sciences PhDs. If Northern Ireland is to respond to the challenge of increasing BERD, and compete as a high technology, knowledge based economy, early investment in additional PGR students is essential.

UK Region	UK	England	Scotland	Wales	N Ireland
Percentage increase in the number of full time PG Students 1995/96 – 2004/05	67%	71.9%	32.6%	45.3%	31.2%

4.16 The position in Northern Ireland is made more precarious by the potential reduction in the extent of support available from the European Social Fund (ESF). The reform of the EU Structural Funds associated with the accession of new member states will reduce significantly the amount of ESF in Northern Ireland. Currently the universities receive some £3m per annum from the ESF. The ESF funds are used to support business focused postgraduate training. Loss of the ESF support will reduce the number of postgraduate students by at least 60 per annum. If Northern Ireland is not to be disadvantaged further in respect of the number of full time postgraduate students there will be a need to give priority to maintaining the current ESF allocation to the universities.

4.17 The report ‘Engineering Ireland 2020’ contained a detailed analysis of the need for additional trained researchers if the Lisbon goals are to be met. That analysis identified the need for the number of postgraduate researchers to be increased by 13% per annum. A similar analysis within the Republic of Ireland led to a programme of investment to double the number of science, engineering and technology postgraduate research students graduating from 500 to 1000 by 2013. The cost of additional postgraduate research studentships to increase graduations in Northern Ireland by 200 per year together with adjustments to ensure comparability with UK programmes requires an investment of £10million per annum.

4.18 The challenges facing Northern Ireland are often couched in terms of how best to secure ‘spill over’ from the economic success of the Republic of Ireland. In this context it is appropriate to consider further the actions that are to be implemented to strengthen the science base in the Republic of Ireland. The Republic’s Strategy for Science, Technology and Innovation sets out a programme of investment for the period 2006-2013. As indicated earlier one aspect of that investment strategy is the increase of science, engineering and technology postgraduate students graduating each year from 543 in 2005 to 997 in 2013. A similar rate of increase is anticipated in respect of the humanities and social sciences.

4.19 In addition the strategy recognises the importance of a world class research base and the need for research teams to be led by world class Principal Investigators (PIs). In this context the strategy anticipates the recruitment of more than 200 additional research leaders and anticipates that the effect of that recruitment will be to increase other research related staff by more than 800. Overall the investment by the Republic in strengthening its research base will be of the order of £1.2 billion equating to more than £150 million per year. The impact of this investment, if there is no additional investment within Northern Ireland, will be to create a reverse ‘spill over’ with Northern Ireland’s best graduates, postgraduates and researchers accepting positions in universities, such as those in the Republic of Ireland, that have the funding to provide new resources and opportunities to develop their careers.

4.20 Discussion of the contribution of research must also consider research in disciplines other than science and engineering. Both universities have significant strengths in a wide range of disciplines that have the potential to contribute to the economy in addition to the social and cultural wealth of Northern Ireland. Examples are research in Design, Built Environment (Architecture) and Media.

5. Innovation

5.1 Innovation is the process of converting new knowledge generated by the research base into new products and processes to create wealth or otherwise improve the quality of life. Successful innovation requires an effective dialogue and articulation between companies and the university research base. Thus if Northern Ireland is to benefit from a strengthened research base, the development of this activity is critical.

5.2 The critical nature of industry - university interaction and collaboration has been recognised at national level and is now one element of the EU’s 10 point Programme for Innovation.

5.3 If Northern Ireland is to create an environment in which local companies recognise the contribution of investment in research and can have the benefits demonstrated, radical action is required. Queen’s University has in the past developed the concept of Industry - University Collaborative Research Centres (IUCRCs). These IUCRCs undertake practical applied research and generic development work in response to a programme determined by the industrial partners. The University’s Ionic Liquids Centre (QUILL), which was recently awarded a Queen’s Award, is an IUCRC. The experience in the US is that such centres increase the level of research and collaboration with companies and that participating companies become more innovative. The development of five to eight such IUCRCs, and support for a programme of generic applied research and developmental work, would provide the environment to accelerate innovation in chosen sectors and demonstrate clearly the ‘bottom line’ benefits of research investment to industrial partners.

5.4 The reform of the EU Structural Funds provides a focus on territoriality and collaboration with other EU regions to promote and support infrastructure for innovation and research and development. Properly applied, the EU Structural Funds will allow Northern Ireland to develop relationships that will complement efforts to increase the involvement of local companies in the EU Framework 7 Programme as part of the strategy to increase BERD.

5.5 At national level, HEFCE, in consultation with the DTI and OSI, introduced an initiative for reaching out from HE to business and the community that has now become a permanent metric based funding stream, the Higher Education Innovation Fund (HEIF), and supports the universities’ ‘third mission’. In addition the Government commissioned the Lambert Report to review and remove barriers to increased collaboration between business and universities particularly in respect of SMEs and IP issues.

5.6 HEIF is provided alongside funding for research and teaching. While HEIF outcomes relate overtly to contributions to economic development, the impact of universities on the capacity and capability of the region to develop its economy derives from all three spheres of activity. The diagram below, taken from the Higher Education Funding Council for England website, www.hefce.ac.uk, summarises the outcomes that ensue from universities contributing to their regional economies.

5.7 Within Northern Ireland there have been similar actions that have followed the HEFCE initiative. It is expected that in 2007-08 HEIF (NI) will be embedded as a permanent, metric based, third stream of funding from DEL to support interaction between the universities and business. That funding will be complemented by a new HE/FE Collaboration Fund that will develop the infrastructure to ensure that local business is served by a coordinated support service providing access to the resources of the universities and the FE colleges. To realise the full potential of the contribution from the FE colleges there will be a need for increased resources for the second phase of the HE/FE Collaboration Fund.

5.8 The collection of robust data on UK universities' third stream activities is at an early stage but findings of the UK Higher Education-Business, Community Interaction survey (HE-BCI) provide pointers. The most recent data published refer to the 2003-04 year and show that the total activity of the sector in delivering 'knowledge exchange' can be valued at around £2 billion, around £1 billion of which was delivered through contract and collaborative research for business to develop new knowledge and innovative applications. It is expected that the results of the HE-BCI survey for 2005-06 will be used to determine the HEIF allocations to universities in 2007-08.

5.9 Science and Innovation Minister, Lord Sainsbury, said: 'overall we are seeing a steadily increasing contribution by our universities to the economy of the country.' Higher Education Minister, Bill Rammell said: 'This year's HE-BCI survey provides yet more evidence of the growing importance of colleges and universities to the UK economy. We should no longer think in terms of universities simply carrying out research under contract to business, but should also acknowledge the role that they are playing in expanding our national skills base and the many other ways in which they are engaging with their local and regional communities.'

5.10 The published analyses of the HE-BCI survey allow some assessment of the performance of Northern Ireland universities relative to the UK. However, direct comparison is not possible due to the lag time in availability of HEIF monies. In common with other universities HEIF in Northern Ireland has allowed the appointment of dedicated staff whose responsibilities range from the promotion of technology transfer services to the in-house preparation of patent filings and mentoring of spin-out companies.

5.11 The Northern Ireland universities provide a range of technology transfer services to industry aimed primarily at assisting companies to increase their competitiveness and improve their productivity. The services typically encompass improved/new product and process development, improved business and management practices, waste management and other cost reduction, testing and analysis and access to facilities and equipment.

5.12 The survey confirms significant interactions with SMEs in Northern Ireland with some 340 research contract and technology transfer projects delivered in 2003-04. This is not surprising given that more than 99.5% of all Northern Ireland companies are SMEs and the larger companies, that are subsidiaries of MNEs, tend to invest less than the average for their sector in research within Northern Ireland. The survey also measures the level of patent and licensing activity during the particular year. Data from 2003-04 relating to Northern Ireland universities' patents and licensing is set out below:

Metric	Number	% of all UK universities
Technology disclosures	50	
Patent filings	43	3%
Total patent portfolio	115	
Licences	2	<1%

5.13 With 3% of total UK university patent filings the Northern Ireland university performance indicates that it is performing rather better than the majority of universities. More than half in the UK had no filings while institutions with significant track records, e.g. Oxford and Southampton, recorded 150 and 101 filings respectively. Over time Northern Ireland's performance will improve as the benefits of the SPUR investments begin to bear fruit.

5.14 In addition to undertaking technology and knowledge transfer with companies, universities also make a direct contribution to economic development through the formation of 'spin-out' companies and the licensing of their technology. This direct contribution to the economy through the exploitation of the universities' intellectual property and 'know how' is evident in the number of spin-out companies that have been formed and sustained. Some 68 spin-out companies in total have been established, all with the potential to trade on a global basis. Companies such as Andor Technology, Kainos and Lagan Technologies have become leading high technology companies in Northern Ireland.

5.15 Data from the HE-BCI survey 2003-04 includes the following information on the knowledge exploitation successes of the Northern Ireland universities:

Metric	Number	% of all UK universities
No. of active spin-outs surviving after 3 years	37*	6.5%
No. employed in spin-outs	850	11.3%
Turnover of spin-outs	£53.6M	17.4%

* *The 68 spin-out companies mentioned previously includes the 37 active spin outs more than three years old (as in table above), those spin out companies less than three years old and those companies in which the universities no longer hold an investment.*

5.16 In regions where these exploitation activities are more mature a shift is seen from ‘spin-out’ company development to licensing, i.e. from employment creation to wealth creation. The Northern Ireland universities are now pursuing this agenda; however, the low absorptive capacity of the Northern Ireland economy means that without changes in the economy the potential job creation benefits of the licences will be realised in other regions. However other linkage and reputation benefits accrue for Northern Ireland from the licensing deals between global companies and the universities. QUILL and UU’s Biomedical Research Institute are prime examples of a world class research area attracting global companies to Northern Ireland seeking technology to licence This hub generates a reputation of excellence for Northern Ireland which attracts attention internationally and may in the future result in foreign direct investment opportunities.

5.17 The HE-BCI survey is being reviewed currently and its next data collection, in late 2006, is expected to put greater emphasis on outcomes.

6. Strategy for Science, Technology and Innovation (Ireland)

6.1 Reference has already been made to the fact that the Irish Government has recently published its Strategy for Science, Technology and Innovation (2007 – 2013). This strategy identifies a range of key goals which include increased participation in the sciences, increased numbers of people with advanced qualifications, enhanced contribution by research to economic and social development, transformational change in the quality and quantity of research, increased output of economically relevant knowledge, increased trans-national research activity, an international profile for Ireland and greater coherence and exploitation of synergies nationally and internationally.

6.2 The net additional resources required to implement the Strategy have been costed at €1.88 billion over the period to 2013. Of this, some €640 million is to support higher education infra-structure, €340 million for enterprise support, and €900 million for research and commercialisation programmes in the Higher Education Institutions and the public research system. The seven universities in the Republic have been recognised and supported as they are pivotal to the success of the strategy and will be the beneficiaries of the planned investment.

7. Conclusion

7.1 All the evidence suggests that the direct and indirect economic importance of higher education will continue to grow in the future. The essential expansion of the science base, the development of knowledge transfer and exploitation activities plus the pressure to increase student numbers, domestic and international all point in the same direction. Such activity depends on a continuing mix of public and private investment in the sector. Income from private sources is increasing and will continue to increase as the impact of the introduction of variable tuition fees is felt. It is equally clear that public investment will continue to play a vital role in the development of the sector. It is evident from the findings of the UUK report that such investment has important, if not essential, direct and indirect economic impact on the development of the regional economy. In order to realise the benefits of the universities further investment and related actions are required if Northern Ireland is to have a sustainable knowledge based economy.

7.2 The following additional investments and actions are proposed

- Developing a 'skills pipeline' via collaboration between education and training providers, ensuring an emphasis on the development of SET skills.
- Introducing programmes that will increase the number of SET graduates and postgraduate employed within local SMEs.
- Strengthening the research base to deliver a world class, globally connected science base and creating a top 200 university - £20M p.a.
- Increasing the number of postgraduate research students graduating from the Northern Ireland universities each year by 200 per year - £10M p.a.
- Establishing industry led technology hubs and driving up BERD over the next 5 years - £10M p.a.
- Embedding and enhancing HEIF (NI) as a permanent, separate, metrics based funding stream within the DEL funding for universities and increasing the HE/FE Collaboration Fund to enhance further the contribution of FE colleges to economic development - an additional £4M p.a.
- Maintaining the operation of the Invest NI Proof of Concept Programme and establishing the HEIF seed corn fund and integrating related support for the universities' knowledge exploitation activities.

7.3 Information on each of these proposals and the anticipated benefits are set out in the following Appendices:

Appendix 1: Strengthening the Research Base - £20M p.a.

Appendix 2: Increasing the number of Postgraduate Research Students (PGRs) - £10M p.a.

Appendix 3: Establishing Industry led Technology Hubs - £10M p.a.

Appendix 4: Improving the infrastructure to enhance and facilitate collaboration between business, universities and HE/FE - £4M p.a.

Appendix 1
Strengthening the Research Base - £20M p.a.

The importance of a strong science base as a driver of economic development is now well accepted. The investment in developing and sustaining a world class research base within the universities in North Carolina created the dynamic Raleigh Triangle Park and the growth in the biotechnology sector in that region. More recently within the UK the benefits of investments in leading edge research in the North West Region are now evident in the growth of that regional economy. Indeed during his recent visit to Northern Ireland Lord Sainsbury, Minister for Science and Innovation, remarked “a pattern is emerging that the best patents, licences and spin out companies emerge from universities with world class research”. It is clear from investments in other UK regions that without such investment Northern Ireland will continue to lag behind those regions and other devolved administrations to the detriment of the community, and will risk becoming uncompetitive to high quality foreign direct investment.

Investments in the Republic of Ireland (RoI) will also affect the ability of Northern Ireland to compete if there is no parallel investment in the science base within Northern Ireland. The benefits of €650M investment in biotechnology and ICT and the establishment of Science Foundation Ireland (SFI) together with complementary investment in the universities’ infrastructure have invigorated the country’s science base. The investments have brought new world leading research teams into the universities and are securing the transition of the economy from one that has capitalised on investment in manufacturing to one that has built upon that investment to embed R&D activity and provide a firm foundation for a successful knowledge based economy. Planned investments in the science base between now and 2013 will strengthen further the competitive position of the RoI economy.

Recognising that the nature of modern science requires access to a range of facilities and skills, any investment in the science base needs to capitalise on the opportunities for collaboration to provide access to expensive and specialist facilities and to bring together research teams with the necessary breadth and depth of skills and expertise. In addition, within the EU such collaboration provides a foundation for accessing research funding through the EU Framework Programme and developing partnerships with leading MNEs to address major problems to ensure that the EU economy is more innovative and more competitive.

The proposal for investment in the Northern Ireland science base seeks funding of £20M per year to bring into the universities in Northern Ireland additional world leading research teams. Such investment would however be part of a collaborative programme with universities in RoI to build upon prior investments in individuals and infrastructure to establish more broadly based world leading research groups with critical mass and ensure maximum impact from investment. Thus a prerequisite for support would be a meaningful North-South collaboration. In developing proposals for North-South research partnerships it would be expected that SFI would, through the funds allocated to it as part of the RoI Science and Technology Strategy, provide parallel support for the complementary investments in the RoI university research partner. In order to ensure the proposals are related to the recruitment and retention of world leading researchers, the proposals would be evaluated through an international peer review process as is the current case for SFI proposals. This collaborative arrangement will build upon the model for the US Ireland R&D Partnership within which proposals for tripartite research partnerships in, say, diabetes are peer reviewed by the US National Institutes for Health and if successful are then funded by each jurisdiction.

It is expected that investments would be made in a wide range of areas including electronics, ICT, nanoscience, biomedical sciences, environmental technologies and new materials and processes and involve the recruitment of experienced world leading researchers and their teams into the island's universities.

Outcomes from strengthening the Research Base

Over the five year period the investment would be expected to have the following outcomes:

- The recruitment of at least 20 world leading research teams involving at least 100 additional high quality jobs.
- The establishment of at least 10 world leading research partnerships/consortia on the island.
- The development of externally funded research programmes that address key barriers in the technology road maps of MNEs in the Pharmaceuticals. Environmental Technologies, ICT and Electronics and Health Technologies.
- Participation in at least 20 major proposals under the EU Framework Programme.

In addition after the initial investment period it would be expected that the research teams would secure additional external research grants and contracts that would provide

- £30M additional research funding to the universities each year.
- 200 additional jobs for post doctoral scientists.
- 100 additional jobs for technical and support staff.
- A magnet for high quality inward investment.
- In the long term an economic benefit through patents, licences and spin out companies.

Within the UK funding attracted by universities from external funders such as research councils and major charities is funding which attracts premia that are allocated to the top respective 'earners'. Traditionally funding from DEL, though it may be allocated in lieu of such UK funds, has not attracted such premia. Arrangements should be agreed with relevant UK bodies to ensure that such recognition is accorded. Thus the locally allocated funds can be leveraged and the activities can be sustained more readily.

Appendix 2
Increasing the number of Postgraduate Research Students (PGRs) - £10M p.a.

As knowledge based economies develop, their demand for science and technology graduates and postgraduates also increases. There is evidence that high quality inward investment is more and more associated with the companies' need to secure access to high quality scientific and technological skills. Within Northern Ireland there is evidence of this. The investment by Seagate was embedded by a programme of building up the fundamental science base within the universities and delivering a stream of postgraduates to staff the new R&D facility. More recently the investment by SAP has included the development of an additional PGR stream to build the new research facility as part of the company's international network of research groups.

At the same time existing ESF resources for postgraduate training within Northern Ireland are at risk as part of the reform of the EU Structural Funds. The loss of the current annual allocation of £3M will reduce the number of highly qualified postgraduate scientists graduating each year by at least 60. This reduction is against a trend of increased investment by other UK regions as they and the UK Research Councils respond to the growth targets within the Lisbon Agenda. Without a significant increase in PGRs there is little prospect of the EU economy being the most competitive knowledge based economy, and regional disparities between Northern Ireland and other UK and EU regions will only increase. The expansion of PGRs is an integral part of the RoI Science and Technology Strategy. The doubling of opportunities for PGRs in RoI and expansion in other UK regions will, if not addressed as a matter of urgency, weaken the science base in Northern Ireland and lead to the outward migration of indigenous talent without a compensating inflow from other EU states and other countries.

The sum of £10M per year is needed to provide an additional 200 PGR studentships per year. This increase will enable Northern Ireland to remain competitive with other UK regions and devolved administrations. In providing such support there is also a need to ensure that the arrangements for PGRs in Northern Ireland are no different from those in other parts of the UK. Thus there will need to be adjustments to the existing terms and conditions to introduce the facility for an average duration for the Ph D of 3.5 years, the ongoing development of generic skills training and a provision to facilitate the recruitment of the best students from other EU regions and other countries. Such recruitment will facilitate further the development of global research networks and partnerships that will link the Northern Ireland economy with leading MNEs throughout the world.

Outcomes from increasing the number of Postgraduate Research Students

The following outcomes are anticipated:

- An increase of 200 PhD graduates to meet the scientific and technological needs of indigenous companies.
- The availability of highly qualified scientists and technologists to attract and retain high quality inward investment.

- The retention and further training of Northern Ireland graduates in science and technology.
- The recruitment of highly qualified graduates from other countries to support the global connections, internationalisation and competitiveness of the Northern Ireland economy.
- Improving the competitive position of Northern Ireland within the UK and its devolved administrations as a location for high quality Foreign Direct Investment.

Appendix 3
Establishing Industry-led Technology Hubs - £10M p.a.

The nature of the Northern Ireland economy, with a limited number of large technology based companies and a high proportion of SMEs, means that a major and radical effort is needed if BERD is to be increased to acceptable levels. It is recognised that the universities will have to provide significant "technology push" to achieve the increase in BERD. From a company perspective that requires the universities to inform the companies of the opportunities arising from technological advance and to demonstrate the benefits that the adoption of new technology can make in terms of new products or processes and the benefits to the "bottom line".

An opportunity exists to build upon some of the "cluster" development work undertaken in response to the Regional Innovation Strategy and under support from HEIF (NI), and to develop five to eight technology hubs. If BERD is to be increased it is important that these hubs are industry led and access the resources and contacts from world class research groups within the universities. The focus of the research activities within these hubs would be upon generic problems that will open up opportunities for participating companies to undertake their own company or product specific research that would build upon the generic research. The model for this was developed within the US and is termed an Industry-University Collaborative Research Centre (IUCRC). In Northern Ireland two such centres have been established, both within QUB and both have won a Queen's Award that recognised their success. The two IUCRCs are QUESTOR, a centre focusing on environmental management, and QUILL, a centre with a clear focus on ionic liquids in chemical processing. Members of these centres have benefited from the generic research undertaken by the IUCRC and there is a track record of the member companies supporting follow on projects of particular interest and increasing their own expenditure on BERD.

The sum of £10M per year is required to support the establishment and development of industry-led technology hubs. This will include the strengthening of the current cluster arrangements, determination of priorities for generic research, the initiation of collaborative generic research for future application and the developments of contacts with complementary industry partners outside Northern Ireland to facilitate the creation of global research and trading partnerships. It is expected that these partnerships will in turn generate research and development activity within the partner companies leading to increased BERD and participation in appropriate EU programmes including Craft as well as Invest NI programmes such as START and Compete.

Outcomes from establishing Industry-led Technology Hubs

Over the first five years the project would be expected to have the following outcomes:

- The establishment of more than five and up to eight industry-led technology hubs.
- The involvement in the industry hubs of more than 100 Northern Ireland based companies.
- Participation in generic research programmes by more than 60 Northern Ireland based companies.

- More than 20 follow on projects requiring commitment of BERD by member companies.
- An increase in the number of SET graduates and postgraduates recruited by member companies.

In addition, after the investment it would be expected that:

- Member companies would increase BERD by at least 33%.
- That the number of member companies would increase by 20%.
- That member companies would be involved in at least 30 follow on research projects involving support from EU or Invest NI research programmes.
- That at least 20 member companies would be supporting follow on research projects within the universities.
- That at least 20 member companies would be involved in international research or trading partnerships brokered through contacts established with support from the technology hubs.

Appendix 4
Improving the infrastructure to enhance and facilitate collaboration between business, universities and HE/FE - £4M p.a.

The Department for Employment and Learning have since 2000 supported the development of interaction between the universities and business and the community. Initially this was supported through the Higher Education Reach Out to Business and the Community (HEROBC) Fund that was then translated into the Higher Education Innovation Fund (HEIF (NI)) as the need was accepted to develop a permanent stream of funding for what is now recognised as the universities' third mission. Within Northern Ireland there has been support for HEIF (NI) from Invest NI. However such funding is usually on a project basis and not related to establishing and maintaining a perm-anent infrastructure. The developments within GB have been towards the introduction of a permanent metrics based funding stream through HEFCE to allow universities to consolidate and maintain essential infrastructure to enhance and facilitate interaction with industry and commerce. In order to ensure that the Northern Ireland universities are able to respond to the needs of local companies and support additional initiatives to provide essential "technology push", and not be at a disadvantage compared with other UK universities, it is important that the permanent third stream of funding is established and that £2M per year additional funding is provided to enable DEL to support these developments within the universities.

It is planned to introduce an HE/FE Collaboration Fund with effect from April 2007. The details of the proposed operation of that Fund have been discussed with the Business Alliance and there is appreciation that this is a valuable and necessary initiative. However the scale of the funding is considered inadequate to meet current needs. The Fund will allow the establishment of a common marketing and information sharing resource as well as creating linkages between the Research Centres, Knowledge Transfer Centres and other resources within the universities and the expertise and training resources of the FE Colleges and their Centres of Excellence. However there are insufficient funds to deliver many of the other objectives and targets set out in "FE Means Business" and to ensure that FE and HE can work together to make a significant and practical contribution to local economic development partnerships and programmes. Increased funds of £2M per annum are requested to ensure that the full impact of the combined resources of FE and HE can be delivered to companies in a coherent and consistent manner throughout Northern Ireland.

Outcomes from improving the infrastructure to enhance and facilitate collaboration between business, universities and HE/FE

The following outcomes would be anticipated:

- The consolidation and enhancement of the universities' infrastructure for interaction with business as a permanent feature of the universities' mission.
- The establishment of a single business focused point of access to the training, consultancy and research support available in the universities and the FE colleges.

- The transfer of the HEROBC and HEIF experience from the universities to the FE colleges.
- Joint training programmes in knowledge transfer for university and FE college staff.
- Increased business awareness of technological advances and the opportunities for innovation in partnership with HE and FE.
- Increased participation by companies in knowledge transfer programmes such as the KTP (formerly TCS and CBP).
- Increased use by companies of the resources for training and consultancy within the FE colleges.
- An increase in the number of collaborative projects that involve business, universities and FE colleges and make best use of their respective strengths.
- Increased coordination and cooperation in terms of developing a “skills pipeline” to meet the current and future needs of business.

Economic Research Institute
of Northern Ireland

ASSESSING THE CASE FOR A DIFFERENTIAL RATE OF CORPORATION TAX IN NORTHERN IRELAND

Economic Research Institute of Northern Ireland
David Greenaway and Holger Görg, University of Nottingham
Frank Barry, University College Dublin
Regional Forecasts Limited

15 November 2006

CONTENTS

1. INTRODUCTION

1.1 Over the past decade there has been a major resurgence of interest in the relationship between Corporation tax (or corporate income tax) and investment and location decisions, particularly by multinational firms. In part this has been a response to earlier research which did not fully appreciate how rapidly the international mobility of capital was developing. Perhaps more important, however, has been the willingness of governments seeking to combat poor economic performance to embrace the active use of low taxes on business profits as a policy instrument to attract new high quality investment.

1.2 This study has been motivated by growing concerns that the performance of the Northern Ireland economy, though superficially acceptable, is in fact excessively dependent on a growth of public expenditure that cannot be sustained in the current financial climate. Moreover, a considerable consensus is developing among both practitioners and students of economic development policy that the suite of policy instruments that are currently available are rapidly becoming unfit for purpose. These instruments have, with very minor exceptions, always been constrained by the need to maintain a unified taxation system for individuals and companies operating in the United Kingdom.

1.3 The other critical factor has been the performance of the Irish economy, particularly over the past twenty years. To live on the same small island as an economy that has doubled in size in the space of a decade has been a sobering experience for businesses and policy makers in Northern Ireland and has prompted a serious debate on what would be needed to achieve the same results. For some time the Northern Ireland Industrial Task Force led by Sir George Quigley has been pursuing precisely this question and had come to the conclusion that although many factors contribute to a successful economic development strategy (including a measure of luck) the evidence pointed irrefutably to the low Corporation tax policy that the Republic of Ireland has pursued doggedly for many years as the indispensable ingredient.

1.4 In the summer of 2006 the Economic Research Institute of Northern Ireland (ERINI) was asked by the Industrial Task Force to undertake a study that would examine the case for adopting a differential rate of Corporation tax as a key and new policy instrument for promoting economic development in the region. This would be the first formal and rigorous study to look not only at the qualitative evidence available but also to model quantitatively the impact of a lower Corporation tax rate on the performance of the Northern Ireland economy and the cost of such a policy to the Exchequer.

1.5 The timing of the study was also of critical importance. With the deadline for local political parties to accept by the end of November 2006 a process for the restoration of a devolved administration in Northern Ireland it was vital to know whether there was the evidence base to pursue a differential Corporation tax regime as part of the negotiations leading up to the creation of a new Executive.

1.6 The Terms of Reference for the study are attached at Annex A. At the outset it was decided that the work would focus on understanding how Corporation tax influences international capital flows principally through Foreign Direct Investment (FDI) and how important a low Corporation tax would be as an instrument for boosting investment and growth in the Northern Ireland economy. In short the study was to identify the size of the potential prize.

1.7 The corollary is that the study is not concerned with the practical issues that have to be addressed in implementing a differential Corporation tax policy. These are, of course, important issues and in some cases these present a formidable challenge to policy makers but they are of an entirely different nature than an analytical study. It follows that they are best pursued as a differential process, one that translates the science of policy analysis into the art of policy implementation.

1.8 The structure of the study is relatively straightforward. It first considers the economic context in which the idea of a lower rate of Corporation tax in Northern Ireland has to be assessed. This section gives information on the relative performance of the Northern Ireland economy and sets out the conceptual model of regional growth that is relevant for the employment of fiscal policy instruments. The study then goes on to consider what conclusions can be drawn from the by now very large theoretical and empirical literature linking Corporation tax to Foreign Direct Investment flows. The relationship between tax rates and FDI location decisions is particularly important and this section looks closely at this issue. It also examines the wider effects of FDI flows on the performance of indigenous companies which is an important issue for policy makers.

1.9 The experience of a low Corporation tax regime in the Republic of Ireland is fundamental to the analysis in the study since this is clearly the closest and most relevant benchmark available. It is of fundamental importance, therefore, that the evidence from this source is properly weighed and interpreted. This is the focus of the third section of the report.

1.10 The study then goes on to set out the analytical structures for estimating the complex interactions between changing Corporation tax rates in Northern Ireland, the attraction of new FDI flows and their composition and the direct and indirect effects these have on the performance of the regional economy, including its indigenous sector. The modelling also extends to calculating the cost to the exchequer, both in Northern Ireland specifically and for the United Kingdom as a whole, of adopting a differential Corporation tax policy. Since this is an extensive modelling and simulation exercise it is important that the substantial number of assumptions that have to be made are set out clearly and the justifications behind them made transparent.

1.11 The final section of the study draws together all of these strands to attempt to give an overall assessment of the differential Corporation tax option.

1.12 This study has drawn upon the expertise of researchers in Great Britain, the Republic of Ireland and in Northern Ireland. Professors David Greenaway and Holger Görg of the University of Nottingham contributed their extensive knowledge of the large literature on Corporation tax and Foreign Direct Investment. Professor Frank Barry of University College Dublin has written widely on the growth phenomenon in the Republic of Ireland that has become known as the 'Celtic Tiger' and was able to give a uniquely well informed appreciation of the role of low Corporation taxes and other important characteristics in the Republic that allowed the country to get onto a high growth trajectory.

1.13 The modelling work in the study was the primary responsibility of Regional Forecasts Ltd, a specialised regional forecasting and economic analysis company based in Northern Ireland who drew on both official data sources and also bespoke data analysis provided by LocoMonitor, another Northern Ireland firm that tracks data on Foreign Direct Investment around the world. Taking account of the ERINI inputs at each stage and the co-ordinating role played by the Institute it is fair to say that this study is the result of the work of many hands.

2. BACKGROUND AND POLICY CONTEXT

Introduction

2.1 This section examines the relative performance of the Northern Ireland economy. Since the use of Corporation tax as a policy instrument is intended to shift the growth of the economy onto a higher sustainable trajectory the principal focus of the section is on the relative productivity performance of the economy. A conceptual framework for examining the growth mechanism in a small and relatively open region such as Northern Ireland is also provided.

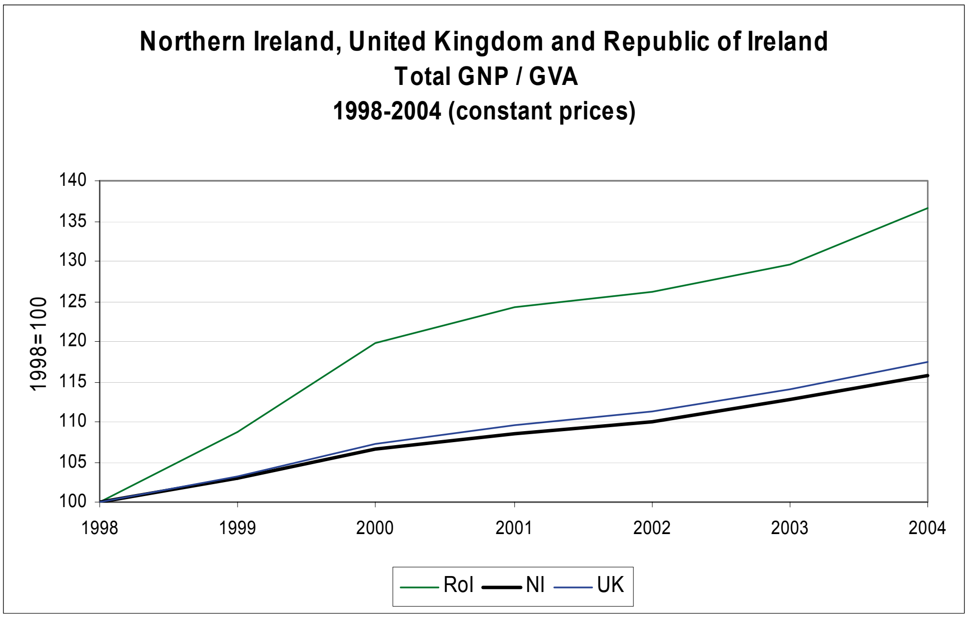
Economic Structure and Performance

2.2 Northern Ireland is a relatively small and relatively poor economy, compared to its two neighbours, Great Britain and the Republic of Ireland (RoI). Its population of 1.7 million is 3 per cent of the United Kingdom (UK) total and about 40 per cent of that of the RoI. According to a recent review of the economy, Gross Value Added (GVA) a widely used measure of economic activity, was 2.3 per cent of the UK's total in 2003 and 26 per cent of that of the RoI (Goodbody, 2005). Moreover, its performance relative to the latter has meant that this share has steadily declined, having been 44 per cent a little over a decade earlier. Indeed since 2003 the share relative to the RoI has fallen to 23 per cent. The region is one of the poorest in the UK, with GVA per capita standing at 77.3 per cent of the UK's average.

2.3 The scale of the issue is illustrated in Figure 2.1 below which shows growth in the RoI, Northern Ireland and the UK from a common base in 1998. The Northern Ireland economy is gradually falling behind average UK growth but both economies have been massively outstripped by the RoI which is clearly on a totally different growth trajectory.

2.4 This comparative poverty of the region is attributable to two underlying drivers: relatively slow rates of economic growth (particularly in relation to the Republic); and the composition of growth. Although growth over the last decade has been higher than many other parts of the UK, this has to be set against a low base and has been significantly slower than in the RoI. Moreover, it has been fuelled by public sector rather than private sector growth and the former now accounts for over 27 per cent of GVA (compared to 18 and 14 per cent respectively in GB and RoI).

Figure 2.1



2.5 Whatever the context, sustained economic growth is fundamental to wealth creation and poverty reduction. Neither can be achieved on a sustainable basis by transfers and redistribution. Economic analysis demonstrates clearly that the key drivers of growth are the quantity and quality of an economy's productive factors – crudely, its people and capital – and the way in which these are combined. These interactions determine the underlying rate of productivity growth.

2.6 Factor accumulation and productivity growth are also affected by the broader institutional environment. In this regard, Northern Ireland has been at a serious disadvantage compared to Great Britain and Ireland. For decades, factor accumulation and in particular investment in new capital stock, was undermined by the fragile political environment associated with 'the troubles' and misallocation of resources to declining sectors. As a result, private sector investment stagnated and inward investment declined to a tiny fraction of that attracted by RoI and which fuelled the latter's spectacular growth performance. In parallel, dependence on the public sector increased, for investment, employment and transfers. Can Northern Ireland emulate its southern neighbour? Can its growth performance be accelerated and its dependence on the public sector reduced?

A Conceptual Growth Model

2.7 A useful conceptual framework for examining the potential for growth in a small and open economy is the export led growth model. The hypothesis behind this model is that although growth is a complex phenomenon, a key factor for small countries whose domestic market is too small and too poor to support a rapid accumulation of labour and capital is to focus on connecting to the wider world market through the promotion of exports. This can be accomplished most rapidly by attracting foreign investment with an export bias to locate in the region. Apart from the effects on the host region's balance of payments such investment induces a number of other positive external effects such as more efficient allocation of existing regional resources, the promotion of economies of scale in production and improvements in the human resources available both through training and certain demonstration effects. Another way of thinking of this is that the overall level of productivity of the economy is improved swiftly through rapid restructuring from low productivity traditional sectors to high productivity export oriented sectors.

2.8 How does this framework fit the particular circumstances of Northern Ireland? First note that the private sector in the region is relatively weak and this is reflected in a restricted export base. Indeed a very high proportion of the region's exports by value originate from a very few firms. On its own the private sector would not be able to sustain current living standards even if they are already behind most of the rest of the UK. The gap is filled by a very large public sector funded partly by local tax receipts but also by very substantial annual transfers from the central exchequer. Implicitly these same transfers are responsible for funding most of the trade deficit for the region. Depending on the public sector as a substitute for exports is only a tolerable basis for growth if there is confidence that public expenditure growth can be sustained at a high enough level. In addition the public sector growth engine is inherently incapable of raising productivity in the economy. The slow convergence in the productivity gap with the UK in the early 1990s was mostly due to a slow down in the latter while public expenditure held up in Northern Ireland. In growth terms public spending is a shield against recession but not a sword to cut the productivity gap.

2.9 If the public sector growth engine cannot be depended upon, the export led growth model suggests that the greatest effort needs to go into building up the export base. The question then becomes what are the most effective policy instruments for achieving this goal? The present policy framework for supporting economic development in the UK is based around the idea that there are a limited number of key drivers of productivity and addressing weaknesses in performance in relation to each of these drivers is the top policy objective. As part of the UK Northern Ireland is constrained to the same policy framework though the regional focus is on only four drivers since the other, competition, is considered largely a national policy issue. These drivers are innovation, particularly as manifested in Research and Development, skills, enterprise and infrastructure (which mostly means networks such as roads and telecommunications). These drivers are broadly compatible with the export led growth model, though the degree of integration between them with an export focus is not particularly strong. Attracting new inward investment in this framework cuts across the drivers of innovation, skills and enterprise since new arrivals are assumed to be more research oriented, to have greater skill requirements and be able to offer specialised training and are stronger in terms of entrepreneurial potential than indigenous companies. The issue is, however, more complex than this since the state of the drivers, such as the availability of good infrastructure and well educated workers, is also believed to be part of the lure that will attract foreign investment in the first place. In addition the nature of the financial inducements that are available is also a critical element. Northern Ireland is heavily reliant on expenditure based fiscal instruments such as grants via the Selective Financial Assistance scheme to distinguish it as a desirable location destination for foreign investors. Other inducements that are tax based such as Research and Development Tax Credits are embedded in UK wide schemes with largely uniform rates and are therefore less effective as a differentiating mechanism.

Some Comparisons with the Republic of Ireland

2.10 A later section of this study examines in detail the experience of the Republic of Ireland in its transition from an underdeveloped country to one of the richest States in the European Union. Nevertheless at this stage it is instructive to look at the congruence in potential between the conditions pertaining in the Republic before and during the growth phase with those in Northern Ireland, having regard to the conceptual growth framework set out above.

2.11 Prior to taking –off on an accelerated growth trajectory, the Republic of Ireland was widely perceived as a peripheral economy, heavily dependent on the UK for its trade and over-reliant on agriculture for output, exports and employment. The interaction of several factors changed that. First, EU accession offered on the one hand an opportunity to exploit the large agricultural sector through the Common Agricultural Policy, whilst on the other hand providing opportunities for market diversification. Both gradually marginalised the disadvantages of being on the periphery. Second, inward investment was actively promoted and the economy exploited both its natural assets and a supportive policy environment very successfully. Two key elements of the former were a relatively skilled and, initially at least, relatively cheap source of human capital (compared to the UK) and, second, the English language, which was a key asset for inward investment from the United States, particularly in developing call centres. With regard to the policy environment, the country combined a strategy of extensively promoting the opportunities the country had on offer through agencies such as Forfás, with generous fiscal support channelled through the Industrial Development Agency, including of course a relatively low rate of Corporation tax.

2.12 Are there similar pre-conditions for growth in Northern Ireland today? Undoubtedly there are some. In fact, one might even argue that, but for the fiscal environment, the pre-conditions are promising, for several reasons. First, the political climate has changed significantly and that has reduced political uncertainty, which is everywhere and always inimical to investment. Second, although the rate of population growth is only a little higher than in the rest of the UK, the potential for more rapid expansion of the effective labour force is there, given low participation rates in general and low female participation in particular. Moreover, at a time of accelerating migration in

Europe, immigration into Northern Ireland, is relatively low providing headroom for an additional supplement to the work force if required. Third, the quality of human capital is good, with the region having the best performance in the UK at the higher level school qualifications, though there is room for improvement at lower levels.

2.13 A fourth factor is that future inward investment starts from a low base and against the backcloth of accelerating asset prices and labour costs in the RoI, relatively low land prices and a rapidly improving infrastructure. Finally, like the RoI a generation ago, the region is heavily dependent on the UK for its trade (and transfers) but in contrast is not well integrated to its nearest neighbour, that is, the RoI. There is, therefore, extensive opportunity to expand export penetration in the national economy and in the much larger markets of the European Union and beyond, as well as elaborating linkages with the RoI.

2.14 It is therefore plausible to argue that the pre-conditions for growth are as propitious as they have been for a very long time. One great unknown, however, is the role of the policy environment, relative to the other underlying factors. As we shall see later, there is a large body of evidence that suggests that the low tax regime in the South has been instrumental in stimulating inward investment, which has underpinned Irish growth. We need therefore to ask whether a comparable tax regime in the North is necessary or sufficient to stimulate a virtuous circle of export led growth. First, however, it is necessary to consider what the research literature has to say about the relationship between corporate tax systems and investment, both domestic and foreign.

3. CORPORATE TAXATION AND INVESTMENT

3.1 The increased mobility of capital over the past twenty years and the spread of globalisation in economic activity have attracted a high degree of interest amongst economists. There now exists a large, growing and increasingly sophisticated body of studies of the relationship between corporate tax rates and other factors and the location decisions of FDI projects[1]. The theoretical linkage between Corporation tax and foreign investment is that, other things being equal, a higher rate of Corporation tax reduces the post tax rate of return on an investment (or equivalently requires a higher pre tax return from an investment to maintain an expected post tax outcome) making the taxing area a less attractive location for investment. Further in the case of small and open economies that are highly dependent upon trade, attempts to tax the returns earned by foreign investors results in the shifting of the tax burden onto local residents in the form of lower wages and real incomes[2]. Attracting foreign companies is also desirable because they are normally more efficient and export oriented than domestic firms and because they often generate positive spillovers for the domestic economy. Thus small countries (and where it is feasible regions) have every incentive to compete aggressively on tax rates with other areas.

3.2 The level of corporate taxation is an important element in firms' decisions to invest in a country. This goes for both domestic and foreign firms but is arguably more important for the latter. This is because of the highly mobile character of investment by foreign-owned firms which are by definition part of a larger multinational enterprise and also the higher fixed costs of going multinational as compared to establishing a new enterprise at home. There are in general two aspects of corporate taxation that determine the tax burden for a firm: the *tax rate* and *tax base*. The former determines how much of any profits a company makes are taxed and the latter determines the definition of what constitutes taxable profits. In a recent empirical study, Devereux, Griffith and Klemm (2002) find that for a sample of industrialised

---

[1] Some recent surveys of the literature can be found in: 'The impact of corporate taxation on the location of capital: A review', Devereaux M. P. and Griffith R., Swedish Economic Policy Review 9, 2002. 'Sensible Tax Policies in Open Economies', Hines Jr. J. R., Journal of the Statistical and Social Inquiry Society of Ireland, Vol XXXIII (2003).

[2] This classic result was first formulated in 'Optimal taxation and public production, I: Production Efficiency (II Tax Rules)', Diamond P. A. and Mirrlees J. A., American Economic Review, 61, pp 261-278.

countries statutory corporate tax rates decreased in most countries over the period 1982 to 2001, while the tax base appears to have been widened. A lower tax rate is of course beneficial to firms, while a broadening of the tax base works in the opposite direction. In order to judge the overall effect on firms, a measure of the *effective tax rate* can be calculated by combining tax rate and base.

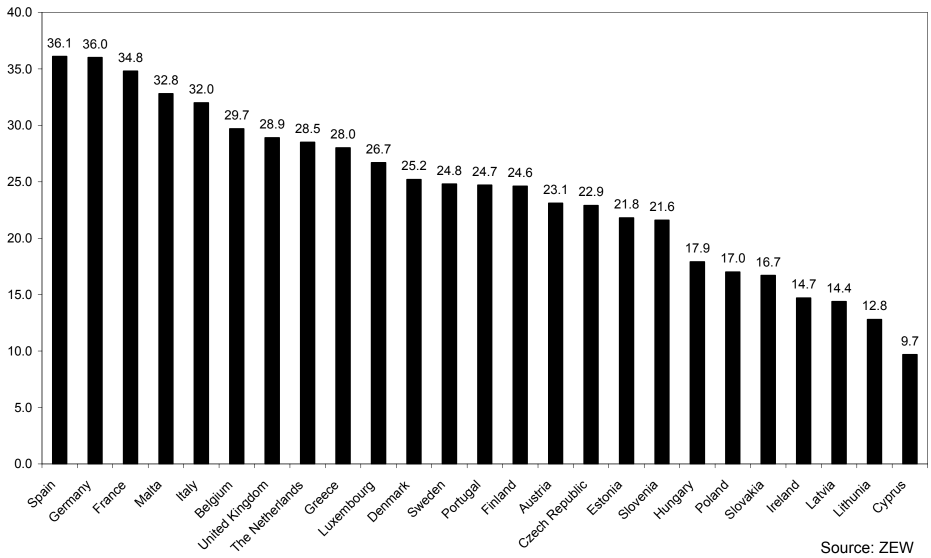
3.3 The economics literature distinguishes two different concepts of the effective tax rate: the effective *marginal* and effective *average* tax rate. As Barba Navaretti and Venables (2004, p. 245) define it "*The effective* ***marginal*** *tax rate (EMTR) captures the investment incentives for a marginal project, while the effective* ***average*** *tax rate (EATR) gives a similar measure for average income of a plant or firm"*. More formally, the effective tax rate distinguishes between the theoretical concept of pure economic profit and the income on which tax is actually levied given the particular tax regulations of a given country. The classic way of calculating the EMTR is to assess the pre tax rate of return to a hypothetical marginal investment that is required to earn an after tax return that is equal to the prevailing interest rate. The EMRT is then defined as the difference between the required pre tax rate of return and the interest rate divided by the pre tax rate of return. The EATR on the other hand is a weighted average of the EMTR and the statutory or headline tax rate. The two rates are therefore conceptually different and unsurprisingly apply in quite different contexts as far as decision making by firms is concerned. When it comes to examining the effects of corporate tax rates on the activities of multinational firms, Devereux and Griffith (2002) and Devereux, Griffith and Klemm (2002) argue it is important to distinguish EATR and EMTR. Specifically, the EATR is shown to be the relevant tax rate determining the *discrete investment choices* (i.e. whether to invest or expand) as the average return to capital is what matters for this decision. By contrast, the EMTR is relevant for firms' decisions about the *level of investment*, as the EMTR affects the net marginal return to capital.

3.4 Figure 3.1 shows the differences in EATR across the 25 Members of the European Union[3]. This shows that among the EU member states the UK has the 7th highest tax

[3] The data relate to 2005. The figure is provided by ZEW Mannheim and is available at: http://www.zew.de/en/presse/presse.php?action=article_show&LFDNR=584.

rate, while the Republic of Ireland has the fourth lowest – and by far the lowest among the "old member states" of the EU 15. Indeed, the UK's rate is almost double that of the Irish (at 29 per cent and 15 per cent respectively). Charting differences in tax rates alone of course does not establish any causal link between tax rates and the location of firms. We therefore now turn to discussing the evidence on the question of whether and to what extent does the rate of corporate taxation affect location decisions by firms and in particular inward foreign direct investment (FDI)?

Figure 3.1: Effective Average Tax Rates among EU Member States, 2005



3.5 Assessing the empirical validity of these hypotheses is complicated by both methodological issues and the availability of data. Practically all FDI studies use data on the investment activities of United States firms partly because the US is the main source of FDI flows, but also because the US collects by far the greatest volume and quality of data on FDI. Data on FDI can include financial flows as well as real investment depending on how the investment is financed. In addition funding for FDI can be used to finance mergers and acquisitions which do not result in any net increase in the capital stock in the receiving country. Some care is therefore needed in interpreting FDI data, particularly when it is in an aggregated form rather than representing the activities of individual firms. The latter is usually derived from tax returns of US companies and is invariably confidential but available to US government approved researchers.

3.6 The statistical techniques used to analyse the connections between corporate taxes and FDI embrace both time series and cross section methods. Time series models examine how FDI responds to variations in after tax rates of return on a year by year basis. These studies report a positive correlation between these variables with elasticities around unity (that is, a one percent improvement in the after tax rate of return is associated with a one percent increase in FDI flows). The implied corporate tax elasticity of investment is therefore about -0.6 (a one percent decrease in tax induced approximately a 0.6 percent increase in FDI). Cross section studies exploit the fact that there are wide variations in corporate tax rates between countries to identify the influence of tax on FDI. A common problem with these studies is the omission of variables that are important but which are themselves correlated with corporate tax rates, so producing biased estimates of the tax / FDI linkage. Studies which take account of these fixed effects such as the possible interactions between the tax systems in the donor and host countries also produce a negative tax elasticity[4].

3.7 In his comprehensive discussion of the empirical literature on the subject, Hines (1999, p.305) concludes that the evidence, *"indicates that taxation significantly influences the location of foreign direct investment, corporate borrowing, transfer pricing, dividend and royalty payments, and R&D performance."* Since then much further research has been published on the tax/FDI nexus. Here we will only provide a selective overview of some of the recent and most relevant work.

3.8 Desai, Foley and Hines (2002) examine the link between taxation and foreign direct investment using affiliate-level data for US companies investing abroad over the period 1982 to 1997. Their definition of the tax rate is essentially an effective average tax rate. Their empirical analysis shows a strong negative effect of taxation in the host country on investment by foreign affiliates. Specifically, they estimate an elasticity of 0.5 in their overall sample, i.e. an increase in the tax rate by 10 percent is associated

---

[4] There are interesting variations in some studies between donor countries that use tax exemptions for income earned abroad and those that employ a tax credits system with or without a 'tax sparing' agreement.

with 5 percent lower FDI in the host country. In an extension they allow for the elasticties to differ by host country region. This brings to the fore some interesting differences. In particular, they find that tax effects are particularly strong in Europe, where a ten percent higher tax rate is associated with 7.7 percent lower inward FDI in the host country.

3.9 Görg (2005) also provides an empirical study of the determinants of FDI which includes a measure of the effective average tax rate in the host. He also considers US investment in a large number of countries over the period 1986 – 1996. His results underline the findings by Desai *et al.* (2002) on the importance of taxation, although his estimates suggest somewhat smaller elasticities. More specifically, his results suggest that an increase in a host country's EATR by 10 percent is associated with a reduction in inward FDI by 3.6 percent. An interesting aspect of that paper is that it looks specifically at the trade-off between tax rates and labour market restrictions. He finds that labour market regulations, which put restrictions on firms' ability to exit a country, also strongly deter inward FDI.

3.10 Further empirical evidence on the importance of Corporation taxes in determining FDI flows is presented by Gropp and Kostial (2000), who focus on total FDI inflows and outflows; Grubert and Mutti (2000), Altshuler *et al.* (2001) and Slaughter (2003) who concentrate on the location decisions of US firms; and Hines (1996) who studies the location of foreign multinationals across US states. All of these studies find that the level of taxation is an important determinant of a firm's decision where to locate abroad[5].

3.11 Implicit in this work is the issue of profit shifting as well as real FDI flows. To a large extent, multinational companies have the ability to adjust the reporting location for their taxable profits. If FDI can help to configure the movement of profits then corporate taxes are an integral part of the location strategies of such companies. There is an obvious connection with the tax policy of the donor country in such calculations. For example, a US company investing abroad can finance the investment with equity

[5] Hines (1999) provides an excellent review of the earlier evidence on corporate tax and FDI. His conclusion is that: "Recent evidence indicates that taxation significantly influences the location of foreign direct investment" (p. 305).

in which case its profits are taxable in the host country but free from tax in the US until they are repatriated. On the other hand financing the investment through a loan from the parent company gives rise to tax deductible interest payments in the US and taxable interest receipts in the host country. Thus there is an incentive to finance investments in high tax countries through debt and in low tax countries through equity. The empirical evidence is compatible with this hypothesis. These financial aspects of FDI and the interaction with the tax system are important in that they can greatly influence the amount of tax paid in a low tax host country independent of the actual activity carried out there, but to satisfy taxing authorities in the donor country some evidence of real activity in the host country is required.

3.12 Transfer pricing, where firms attempt to shift their profits to a low tax location in order to avoid taxes in other locations by setting favourable inter-group trade prices is a well known profit shifting device. Manipulation of transfer prices in order to shift profits to low-tax locations is easiest in R&D- and advertising-intensive sectors because these factors make it difficult to locate the exact source of value added. As Desai, Foley and Hines (2006) point out, "OECD governments require firms to use transfer prices that would be paid by unrelated parties, but enforcement is difficult, particularly when pricing issues concern differentiated or proprietary items such as patent rights. Given the looseness of the resulting legal restrictions, it is entirely possible for firms to adjust transfer prices in a tax-sensitive fashion without violating any laws." Their analysis of affiliate-level data for American firms indicates that larger, more international firms, and those with extensive intra-firm trade and high R&D intensities, are the most likely to use low-tax environments.

3.13 The group of advertising-intensive and R&D-intensive sectors, which are those most likely to be attracted by low Corporation tax rates, are listed in Table 3.1 below[6].

3.14 In the absence of a comprehensive database on foreign-industry employment across the EU, it is difficult to compare the Irish experience in capturing these sectors to that

[6] According to Davies and Lyons' (1996) categorisation, these sectors accounted for over 65 percent of foreign employment in Irish manufacturing in 2000, up from 45 percent of a much smaller base in 1973. This increasing share can be ascribed either to changes in factors other than the tax rate – such as the economy's increasing stock of human capital – or to a possible increase in the elasticity of FDI flows with respect to Corporation tax rates, for which Altshuler *et al.* (2001) provide evidence.

of other countries. It is known however that certain of these sectors, and in particular transport and aerospace equipment, are very difficult for smaller countries to attract, and particularly those without land transport links to large-country markets. This is verified in the following table, on the sectoral distribution of US capital expenditures across EU countries, which shows that Ireland has a very much higher weight than the UK and the EU12 in electrical and electronic equipment, and a much lower weight in transport equipment.

Table 3.1: Advertising- and R&D-Intensive Sectors

Type A	Type R	Type AR
Oils and fats	Basic chemicals	Paint and ink
Dairy products	Industrial and agric. chemicals	Pharmaceuticals
Fruit and vegetable products	Domestic and office chemicals	Soaps and detergents
Confectionery	Man-made fibres	Tractors and agric mach
Animal foods	Machine tools	Radio and television
Other foods	Textile machinery	Domestic elect appliances
Distilling	Transmission equipment	Motor vehicles
Wine and cider	Paper/wood machinery	Optical instruments
Beer	Other machinery	Clocks and watches
Soft drinks	Computers and office mach.	
Tobacco	Insulated wires and cables	
Musical Instruments	Electrical machinery	
Toys and Sports	Electrical equipment	
	Telecom and measuring equip.	
	Electric lights	
	Motor vehicle parts	
	Railway stock	
	Cycles and motor cycles	
	Aerospace	
	Measuring instruments	
	Medical instruments	
	Rubber	

Note: Type A refers to advertising-intensive, Type R to R&D-intensive and Type AR to sectors that are intensive in both.

Source: Davies and Lyons (1996), Appendix 2.

Corporation Tax and Sector Specific FDI

3.15 Most of the literature on the effects of taxation on foreign direct investment considers aggregate evidence, not distinguishing different types of FDI. However, there are some notable exceptions. For example, Swensson (1998) looks at the effect of state-level tax rates on the location of foreign direct investment across US states and distinguishes different types of transactions, such as establishment of new plants (greenfield investment), expansion of existing plants, mergers & acquisitions, and joint ventures. She finds that the effect of taxation does indeed differ across these types: high taxes have negative effects on the establishment of new plants and plant expansions, while they are positively correlated with FDI through mergers & acquisitions. The latter may reflect the fact that high taxes are correlated with other unobserved state level characteristics that are also correlated with acquisition FDI (e.g. the presence of viable targets due to market potential or well established infrastructure) but the paper nevertheless makes the convincing point that different types of FDI can be affected differently. As Northern Ireland, like the Republic, receives most of its FDI through greenfield or expansions of existing firms, these results point clearly to the importance of taxation in such cases.

3.16 Hines (1995) focused on R&D activity by multinationals and the relationship with local tax rates. He argues that differences in royalty withholding taxes can partly explain differences in R&D activity by multinationals in different locations. His empirical analysis shows that affiliates of US multinationals are more R&D intensive if located in countries that impose high withholding taxes on royalty payments. This suggests that local R&D and imported foreign technology are substitutes – as the cost of the latter rises, firms tend to do their own R&D rather than buy in technology from abroad.

3.17 In summary, the empirical literature points to a qualitatively important inverse relationship between corporate tax rates and the attraction of FDI, though there is uncertainty over quantitative values. Factors other that tax are, of course, important in the FDI equation and the existence of a pool of well qualified labour, reasonable infrastructure, business friendly and robust political structures and membership of wider economic unions, to name but a few, have a role to play. However, in circumstances where these locational factors are similar, the existence of a lower rate of corporate tax is a powerful attraction to mobile international capital.

4. CORPORATION TAX AND THE 'CELTIC TIGER'

Introduction

4.1 The term 'Celtic Tiger' refers to the Irish Republic in its accelerated growth phase which began early in the 1990's and continues to proceed, albeit at a slower pace today. In its peak years the economy was growing at a rate which would effectively double its size in a decade. In the 1980s the same economy was in very deep trouble with sluggish growth, high unemployment and unsustainable levels of public debt. Certainly the development of every country is to some extent a unique process but the parallels between Northern Ireland and the RoI are from an economic perspective too close not to pay particular attention to how the economy in the South was turned around in such a short space of time and the role played by fiscal measures in that transformation.

Irish Corporation Tax and Growth

4.2 The Irish experience with low Corporation tax goes back to the 1950s. At that time the economy was highly dependent upon agriculture and operated behind protective tariffs. The results were very poor performance, with growth of less than 2 per cent per annum and recurrent balance of payments crisis as imports of consumer goods and capital equipment outran exports. The First Programme for Expansion in 1958 began the move away from this position with the adoption of a more open perspective, the encouragement of foreign investment and a focus on export growth. The Export Profits Tax Relief (EPTR) scheme introduced in 1956 initially gave a 50 per cent remission on profits from manufactured exports raised two years later to 100 per cent. Full relief was given for fifteen years and tapered relief for a further five years. The period of relief was later extended to 1990. Combined with a more liberal approach to foreign ownership of firms this tax break gradually began to grow the manufacturing base from a very low level. A further boost was given by the Anglo-Irish Free Trade Agreement in 1966 which encouraged firms from the UK to invest in Ireland but it was not until the accession to the European Economic Community in 1973 that the full benefits of FDI both in terms of employment growth in manufacturing and the diversification of the production base and exports to foreign markets began to be felt. Employment in foreign owned companies grew by a quarter between 1973 and 1980 but thereafter began to decline as attempts to emulate a European social economy model without the productive resources to support it led to macroeconomic mismanagement and recurrent fiscal crises. In this period the EPTR scheme was replaced in 1978 with a special 10 per cent rate of Corporation tax for all manufacturing companies to run from 1980 to 2000 though existing beneficiaries of the EPTR were allowed to keep the benefit to 1990.

4.3 In the late 1980s foreign investment in Europe and US investment in particular began to accelerate. A significant attraction was the lead up to the creation of the Single Market and Ireland was a major beneficiary of this development. The 1990s were of course the years of the 'Celtic Tiger' but the tax foundations had already been laid for this growth. In anticipation that in future tradable services would be a vital component of foreign investment, the 1987 Financial Services Act created the International Financial Services Centre in Dublin with profits from qualifying activities in the Centre benefiting from a 10 per cent Corporation tax rate. In 1990 the 10 per cent rate was extended to 2010.

4.4 By the end of the 1990s Ireland's low Corporation tax regime had attracted the attention of the European Commission because of its State Aids properties and the very large share of FDI into Europe (especially from the US) that the country was attracting. In 1998 agreement was reached that a 12.5 per cent Corporation tax would apply to all trading companies from 2003. All existing commitments for the 10 per cent rate for manufacturing companies would be kept until 2010 and the then 28 per cent rate for Services would be progressively reduced to 12.5 per cent by 2003. It is worth noting that Ireland has been at the forefront of resisting any moves towards tax harmonization in the European Union and has also opposed moves by Member States to tax affiliates of their companies located in Ireland (so called Controlled Foreign Corporations in the case of the UK).

4.5 The Finance Act 2004 established a new holding company regime aimed at attracting international corporations to establish their regional HQ in Dublin. This would have served to attract other activities also, including shared services and treasury management (Finance Dublin Yearbook, 2004). The main feature of the legislation, which received European Commission approval, is that there is a full exemption from capital gains tax on the sale of trading subsidiaries (in EU or double tax treaty countries).

4.6 This willingness and ability to use the tax system to respond to emerging FDI opportunities is also reflected in the field of regulation. A particularly important example of this arises with respect to the UCITS Directive (see paragraph 4.23 below). In addition the authorities decided to forego VAT and inheritance taxes on certain investment fund activities, and two further items of legislation were enacted the following year to facilitate the development of the investment funds sector. Activity expanded dramatically in response and by 2005 the country had become one of the world's leading locations for the domicile and administration of investment funds (Barry, Thebault and Wojcik, 2006).

4.7 There is no doubt that the Irish Corporation tax regime and its willingness to adapt it has been a major factor in attracting foreign multinationals. In the words of Padraic White, former Managing Director of the IDA – in MacSharry and White (2000) – the low rate of Corporation tax represents "*the IDA's unique selling point, giving Ireland a critical advantage in winning new investment… The (tax) incentives remain to this day the unique and essential foundation stone of Ireland's foreign investment boom.*" Also, Gunnigle and McGuire (2001), conducting a survey among managers of major US companies located in RoI conclude that "*our findings point to the critical significance of Ireland's low corporate tax regime in attracting US FDI to Ireland*" (p. 43) while also identifying the important impact of other factors such as quality, quantity and cost of labour supply.

4.8 Considering the "hard evidence" from some econometric studies which are of particular relevance for the Irish case, the estimated tax elasticity of US FDI flows provided by Altshuler *et al.* (2001) suggests that the stock of US manufacturing investment in Ireland is 70 percent higher than it would have been if Ireland had a tax rate equal to the next lowest rate among the EU 15 (old member states)[7]. Gropp and Kostial (2000) come to an even more dramatic conclusion, suggesting that some 80

[7] The effect is greater of course if comparison is made with the average EU tax rate.

percent of Ireland's net FDI inflow would disappear if rates were harmonised at the average EU level. These estimates are, however, likely to be excessively high, because they ignore a number of other important determinants of FDI which are of relevance – particularly to US firms. These will be discussed below in some detail. Furthermore, the (as yet) barely discernable effects of the May 2004 accession of a number of Central and Eastern European economies with correspondingly low Corporation taxes also supports the argument that these estimates may be high.

4.9 When considering the importance of corporate taxation on foreign direct investment one important aspect to keep in mind is that statutory Corporation tax rates have been falling all over Europe in recent times. While rates were coming down however, the tax base was generally being widened at the same time. Hence, measures of *effective* tax rates are calculated to take into account changes in the tax base, differences in tax base definitions, special investment incentives such as accelerated depreciation allowances and other important aspects of the tax system that are not reflected in statutory tax rate differences.

4.10 Since 2004 Ireland has been joined within the EU by a number of Central and Eastern European economies which also have competitive Corporation tax rates. Effective tax rate measures as reported in Figure 3.1 above shows that these countries also boast comparatively low effective average tax rates[8]. Indeed, it has been found generally that smaller, poorer and more peripheral countries within Europe levy lower Corporation tax rates than larger, richer and less peripheral ones (Baldwin and Krugman, 2004). Of course, with a thinner tax base such countries have less to loose in terms of tax from existing companies. By contrast, the latter group are, because of these very characteristics, more attractive to market-seeking multi-national corporations and will employ these advantages to extract surplus from companies through higher tax rates[9]. The analogy can be carried over to different regions within the same state. Thus in the UK context the relatively prosperous South East with

[8] Note, however, that Estonia has set its Corporate tax rate to zero (on re-invested profits) alongside a flat income tax rate of 26 percent.

[9] Since geographical centrality is important to many industries (Midelfart et al, 2000) core countries can exploit this characteristic to tax some of the rents accruing to the multinational corporations that locate there. It follows that more peripheral countries will choose lower Corporation tax rates.

major concentrations of companies seeks to capture tax from those moving into the region to gain access to its markets. The loss of revenue from a cut in Corporation tax would be significant. On the other hand more peripheral regions with a smaller tax base can use a strategy of lower Corporation tax to promote themselves as attractive profit centres for FDI without suffering large losses of tax from existing enterprises. This form of analysis suggests that a unified Corporation tax rate may not be optimal for different regions within the UK.

Other Factors Influencing FDI

4.11 As already noted, competitive advantage in attracting FDI is also influenced by factors other than Corporation tax rates. That Ireland and the United Kingdom have proved to be particularly attractive locations for US corporations, with the highest levels of US FDI relative to GDP in the EU while maintaining quite different Corporation tax regimes is at least in part due to the English-language and the familiar legal and business environments they offer. Judging from successive JETRO Reports, language has also been a key factor in attracting Japanese investment in the UK[10]. Language and a familiar institutional environment also represent a geographical bridge between the United States and the EU. Proximity between FDI home and host locations remains a statistically significant determinant of FDI inflows, as seen in gravity models such as that presented by Slaughter (2003)[11]. Krugman (1997) emphasises that the reason why distance remains of importance today is likely to arise because of the impediments it places on the speed and ease of communication. Combined with a convenient time zone for companies with world wide operations, these factors mean that the United Kingdom and Ireland are likely to remain favoured locations for US investors in Europe.

---

[10] Kraemer and Dedrick (2002) point out that when Dell Computers first moved into Europe, the company was attracted by locations that were similar to the United States in terms of language and business culture.

[11] The Slaughter (2003) study examining the determinants of US FDI in Europe allows us to pinpoint some key factors behind Ireland's success. He finds geographic proximity to the US to be a significant determinant of the overall level of FDI attracted, while EU membership is found to be particularly significant for FDI in manufacturing and financial services. Smaller markets unsurprisingly attract export-platform activity rather than production for local markets, and US affiliate production tends to be concentrated in low-tax countries.

4.12 In analysing further the Irish experience, it is worth focusing on four further areas of competitive advantage: (i) the education system, (ii) the role of the IDA, (iii) the role of "soft" supports, and (iv) clustering and agglomerations. It is also important to note the extent to which FDI is financed through reinvested earnings (see also paragraphs 4.26 and 4.27 below).

(i) The Education System

4.13 In the early 1960s Ireland volunteered to allow the Organisation for Economic Co-operation and Development (OECD) to examine the country's education system. The subsequent report published in 1965 was damning, noting that more than half of children left education before the age of fourteen. The Irish Government responded swiftly with the introduction of free secondary education and special school transport in 1967. Over the subsequent years, as Irish tertiary education expanded, the composition of the institutions comprising that system also changed. Seventy five percent of full-time tertiary students in the mid-1960s were enrolled in universities, about 20 percent were in teacher training colleges and other specialist institutions, and only 5 percent were in vocational and technological education. By the late 1990s, universities accounted for a much lower 54 percent share, while that of the broad vocational and technological sector had risen to 37 percent. The subject areas in which graduates received their qualifications had also shifted towards a more vocational and technological orientation.

4.14 The UK's early industrialisation had ensured the evolution of a well-developed system to provide an intermediate layer of technicians. It was recognised in Ireland that the education system would need to provide this from scratch if human resources were to be available to sustain the industrial expansion that followed liberalisation. The main components of the technical-education system developed over the course of the 1970s were the Regional Technical Colleges (RTC), which offered programmes of shorter duration than the universities. There was also a limited range of subjects on offer – mostly in the fields of engineering and business studies – while curricula had a practical orientation designed to be responsive to the needs of local industry and business.

4.15 The Institutes of Technology (as the RTCs are now called) play an important role in generating the outcomes whereby Ireland now surpasses the OECD in terms of the proportion of the cohort aged 25 to 34 with tertiary education (Figure 4.1), and (according to the data presented in Figure 4.2) has one of the highest proportions in the world of science and engineering graduates among this age group.

Figure 4.1

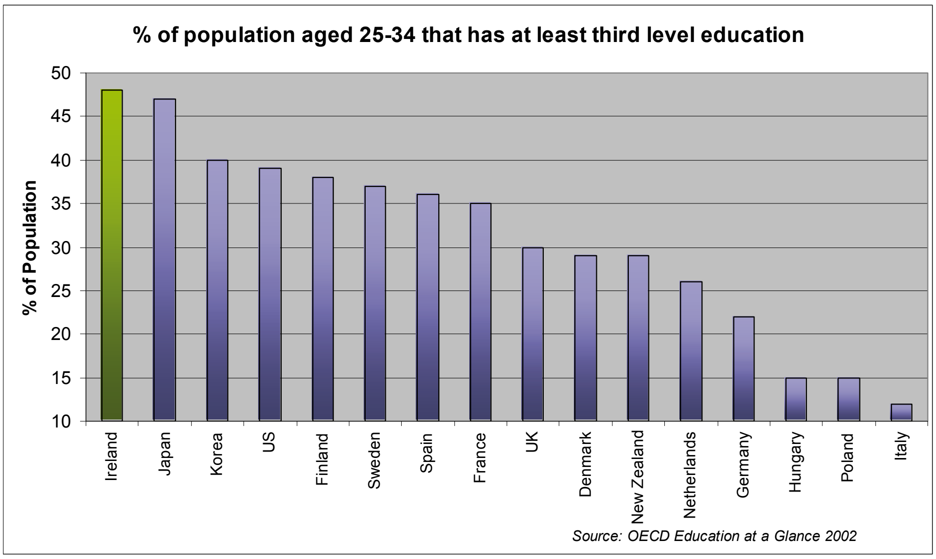
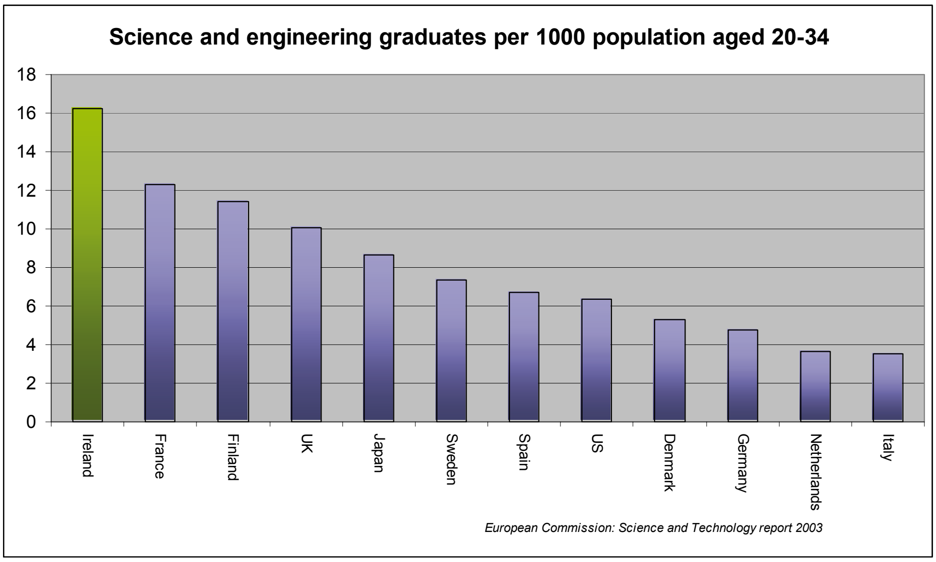


Figure 4.2



4.16 These outcomes, in turn, are largely responsible for the high ranking accorded to the Irish education system in the annual surveys of global executives carried out by the International Institute for Management Development and published as the *World Competitiveness Yearbook*. In the 2005 edition, for example, global executives ranked Ireland number 2 out of a total of 60 OECD and medium-income developing countries in response to the statement "*the educational system meets the needs of a competitive economy*" (with the UK ranked number 36 and Scotland listed separately at number 29) and number 5 out of the same 60 countries in response to the statement "*university education meets the needs of a competitive econom*y". (The UK, by contrast, was ranked in this case only number 38, with Scotland coming in at number 25). Gunnigle and McGuire (2001), furthermore, in a survey of executives of 10 major US MNCs, find that education and skill levels rank second in importance to the Corporation tax regime in drawing these firms to Ireland.

4.17 Ireland remains somewhat unusual by developed-country standards in terms of the responsiveness of the education system to government policy objectives[12]. The Manpower Consultative Committee was established in 1978 to provide a channel of communication between the IDA and the education system. The agency, concerned by the looming disparity between electronics graduate outflows and its own demand projections, convinced the government to fund a massive expansion in capacity in these areas. The output of engineering graduates, as a result, increased by 40 percent between 1978 and 1983, while the output from computer science increased tenfold over the same short period. The IDA in turn was able to use the rapidity of this response – exemplified by the immediate introduction of a range of one-year conversion courses to furnish science graduates with electronics qualifications – as a further selling point to foreign investors.

(ii) The Role of the IDA

4.18 The long-running nature of Ireland's FDI orientation and the resulting FDI-intensity have encouraged the co-evolution of the country's institutional structures to ensure a

[12] The Irish system offers a finite number of places in most third-level courses, and though these numbers are decided within the universities they are subject to government influence given that the latter provides the bulk of funding.

rapid and flexible response to changes in the characteristics of global FDI flows. In the late 1980s, for example, it was noticed that factors such as global deregulation of financial services and the emergence of an electronic marketplace had created an opportunity for a regional location like Ireland to become a player in the international financial services industry. Focused policies since then have seen Ireland's International Financial Services sector become one of Europe's leading off-shore financial centres. Another example is the massive increase in the funding of science, technology and innovation policy over the 2000-2006 period, in line with the global trend towards the offshoring of R&D functions by MNCs.

4.19 The importance of FDI has given the Industrial Development Agency enormous influence within the public-service bureaucracy and the agency is widely regarded internationally as an exemplar of best practice. An important element of governance in the agency's operations is that it is subject to frequent external reviews, which have led to substantial changes in structures and procedures in the 1960s, the 1980s and the 1990s.

4.20 The agency is facilitated in continuously adapting to changing circumstances and global business trends by its "transnational strategic network", consisting of its overseas offices and its relations with investors already in Ireland. These provide it with information about trends in targeted and newly emerging sectors that warrant attention. The resulting feedback to headquarters not only influences the industries or sub-sectors targeted but also guides efforts to inform and persuade the government about required legislative changes, necessary additions to infrastructure, and specific training programs to serve the needs of targeted sectors.

4.21 Ireland's development agencies (Forfás, IDA-Ireland and Enterprise Ireland), through the strong position they have attained in the policymaking hierarchy, have had an impact in areas not traditionally recognised as lying within the industrial policy remit. They played a major role, for example, in forcing through the modernisation of the country's telecommunications infrastructure in the late 1970s and early 1980s and in the development and upgrading of the human capital. They were also instrumental in convincing government to reduce the rate of Corporation tax on services when it became clear to it that services off-shoring would grow to be an important global phenomenon, and in driving the push for the massive increase in government spending on R&D in the most recent National Development Plan 2000-06. As the IDA is the main body with which foreign Multinational corporations interact in Ireland, it is of interest to note that global executives ranked Ireland number 10 out of 60 OECD and medium-income developing countries in terms of government efficiency (*World Competitiveness Yearbook 2005*), while the UK was ranked only number 27.

(iii) The Role of 'Soft' Supports

4.22 A factor the importance of which is difficult to quantify but which interviews with foreign Multinational corporation executives suggest should not be discounted concerns the role of "soft supports". The influence of the IDA ensures that if foreign companies encounter problems with lower layers of the bureaucracy such as county council officials, these will be speedily resolved. Another factor frequently mentioned is the willingness of government ministers to meet Multinational corporation executives. This degree of soft support will only be available in small countries like Ireland. A further manifestation of this is the speed with which necessary legislation can be introduced and passed.

4.23 An example of this can be drawn from the history of the development of Ireland's International Financial Services sector, with regard to the UCITS Directive of 1985. UCITS (Undertakings for Collective Investment in Transferable Securities) are collective investment portfolios dedicated to the investment of assets raised from investors. UCITS were to benefit from a 'single passport' allowing them, subject to notification, to be offered to retail investors in any EU jurisdiction once authorized in one Member State. Ireland was the second country after Luxembourg to implement the Directive in 1989. In addition, the Irish government decided that VAT and inheritance taxes, which in principle apply to some activities of investment funds, should be forgone. Also a new Unit Trust Act of 1990 and the new Companies Act of 1990 were designed in a way to facilitate the development of investment funds. As a result Ireland witnessed spectacular growth in the international investment funds industry.

(iv) Clustering and Agglomerations

4.24 Ireland's long-standing FDI orientation has meant that there has been a substantial period of time for agglomeration and demonstration effects to come into play. Krugman (1997), focusing on the classic Marshallian external economies, mentions the availability of high-quality specialist services in Ireland and of a pool of workers with requisite skills, and notes the likelihood that technological spillovers have also been important, given the clustering of high-technology industries in the country.

4.25 Demonstration effects arise when the location decision of large MNCs causes other large and smaller companies in the same sector to follow suit. Hence it is important to note that Ireland already hosts many market-leading firms. In computer hardware, these include IBM, Intel, Hewlett Packard, Apple and Dell, and in software, Microsoft, Lotus and Oracle. In pharmaceuticals, nine of the top ten companies in the world – including Glaxo, Johnson and Johnson, Pfizer, and Merck – have operations in Ireland, while 13 of the world's top 25 medical devices and diagnostics companies also have bases there. Almost 450 international financial institutions operate from Dublin, including half of the world's top 50 banks and half of the top 20 insurance companies. Barry and Bradley (1997) note that surveys of executives of newly arriving foreign companies in the computer, instrument engineering, pharmaceutical and chemical sectors indicate that the presence of key market players in Ireland strongly influences the location choice of the newcomers, while Barry, Görg and Strobl (2003) provide econometric evidence on the importance of both agglomeration and demonstration effects as determinants of FDI inflows to Ireland.

(v) Importance of Reinvested Earnings in Ireland's FDI Inflows

4.26 Table 4.1 shows that reinvested earnings (RIE), in the data series compiled by the US Bureau of Economic Analysis, comprised an average of 80 percent of US FDI inflows to Ireland over the period 1982 to 1998. A similar pattern is apparent from the IMF data series where, in the 1990-1997 period, they accounted for 95 percent of the total. RIE also account for the bulk of FDI inflows in the data series compiled by the Irish

Central Statistics Office from 1998, though a smaller proportion than in the case of the IMF data[13].

Table 4.1: Reinvested Earnings as Share of Total FDI Inflows to Ireland

US BEA data, 1982-1998	0.80
IMF data, 1990-1997	0.95
CSO data, 1998-2003	0.55

Source: Barry and O'Mahony (2004)

4.27 It is not clear how important the source of funds is for a firm's decision of where to invest. However, it seems a reasonable assumption that a firm is likely to invest in a given location if it can finance its investment through retained earnings. If this is indeed the case then the extent to which FDI inflows are financed through reinvested earnings suggests that a substantial build-up of foreign capital over a long period of time would be required for other states or regions to be able to replicate Ireland's current FDI flows per head. On the other hand, the mere existence of a substantial foreign capital stock in one part of the island may be beneficial for re-investment in the other.

FDI and Economic Performance in the RoI

4.28 FitzGerald and Kearney (2000) explore the impact of Ireland's increased FDI inflows with simulations of a macroeconometric model of the Irish economy. Because the bulk of FDI inflows comes from the United States, Irish GDP is influenced particularly strongly by US GDP. One way to represent the effects of the increased inflows of the 1990s is to increase the elasticity of Irish GDP with respect to US GDP from 1990 onwards. This allows the model to track the improved performance of the

[13] This is possibly because the CSO series includes substantial IFSC-type flows where RIE may be less important.

Irish economy adequately over that period[14]. To explore the role of the increased FDI inflows in this setting, FitzGerald and Kearney (2000) leave the elasticity of Irish with respect to US GDP unchanged at its 1990 level to generate a picture of how the Irish economy might have looked in the absence of the increased FDI inflows. This simulation shows a reduction by 1998 of over 17 per cent of GDP relative to the benchmark, amounting to a reduction in the annual average growth rate of around two percentage points. Moreover, employment would have been 12 to 15 percent lower by the late 1990s, as would the level of skilled wages. Emigration would have replaced the substantial immigration that actually characterised the period. Unskilled wage rates in the model are fixed by the level of unemployment benefits and, with no unskilled migration, unskilled unemployment would have been almost five percentage points higher by the end of the period.

4.29 While it is clear that the specification of FDI is overly simplified in these simulations, they nonetheless serve as an illustration of the possible importance to the Irish economy of increased FDI inflows over the period of rapid economic growth. Further evidence on the importance of FDI for Irish economic performance is provided by studies examining the effects on the development of domestic firms of inward FDI. For example, Görg and Strobl (2002, 2003) and Ruane and Ugur (2004) find that the presence of multinationals in the Irish economy has had strong positive effects on entry, survival and productivity growth of domestic firms.

Effects of Corporate Taxation on Different Types of FDI

4.30 Corporation tax and other factors have a differential attraction for FDI of different types. The evidence is that Ireland has become particularly attractive for investment in chemicals where the fiscal regime has revealed a previously un-disclosed competitive advantage and also in high value electric and electronic products. This is shown in Table 4.2 below.

[14] Of course this might simply be a proxy for omitted variables that are important in explaining the boom. Another criticism is that this approach focuses only on the supply of FDI as influenced by US market conditions and fails to take into account the impact of EU-market conditions on the demand for export-platform FDI. Jarrett (1999), former head of the Ireland desk at the OECD, also concludes however – along with FitzGerald and Kearney – that the role of FDI in Ireland's employment growth is best proxied by US real growth (and stock market outcomes).

Table 4.2: Sectoral Distribution of US Capital Expenditures across EU Countries, 1995 (Per Cent of Total Manufacturing in the Country)

Country / Sector	Food & Kindred Products	Chemicals & Allied Products	Primary & Fabricated Metals	Non-Electrical Machinery	Electric & Electronic Equipment	Transport Equipment	Other Manufacturing	Total Manufacturing
BLEU	13.4	48.6	n.a.	6.3	1.7	n.a.	25.2	100.0
France	6.5	26.7	2.5	21.0	10.5	5.4	27.4	100.0
Germany	10.5	16.8	3.3	11.7	10.4	31.5	15.8	100.0
Italy	5.0	18.8	3.0	15.5	29.7	9.6	18.4	100.0
Netherlands	15.9	38.7	4.6	4.0	4.1	8.2	24.5	100.0
UK	8.9	20.5	3.3	15.5	17.1	18.0	16.6	100.0
Core	9.4	23.5	n.a.	13.7	13.2	n.a.	19.4	100.0
Denmark	30.6	n.a.	2.5	0.6	n.a.	2.5	0.6	100.0
Greece	39.4	48.5	0.0	0.0	0.0	0.0	12.1	100.0
Ireland	2.4	16.5	1.6	9.3	46.6	0.7	22.9	100.0
Portugal	18.4	20.4	2.0	2.0	38.8	2.0	16.3	100.0
Spain	9.6	20.2	n.a.	3.1	8.3	27.6	n.a.	100.0
Periphery	9.0	n.a.	n.a.	5.3	n.a.	13.5	n.a.	100.0
EU 12	9.4	24.2	3.9	12.3	14.6	17.0	18.6	100.0

Note: n.a. = not available.

Source: Görg and Ruane (1999).
Estimates derived from US Department of Commerce data.

Global Trends in FDI by Sector

4.31 The main source of global FDI data, which are the annual World Investment Reports published by UNCTAD, provide sectoral FDI data at only a highly-aggregated level, but the share in both developed-country and world FDI stocks of finance and business services (which is the most FDI-intensive services segment), chemicals, electronics and transportation equipment (which are the most FDI-intensive manufacturing segments) have risen substantially since the 1980s, and these broad segments include the sub-sectors most attracted by low Corporation tax rates[15].

4.32 Along with steadily increasing levels of services FDI, an important new trend in global FDI concerns the off-shoring of R&D functions. Kuemmerle (1999a) provides an early indication of this. Overseas R&D staff in the 32 pharmaceuticals and electronics

[15] This might provide an explanation for the finding of Altshuler *et al* (2001) that the elasticity of FDI flows with respect to Corporation tax rates has risen over recent decades.

Multinationals that he tracked increased from 6 percent in 1965 to more than 25 percent by the late 1990s, while the number of overseas R&D labs increased from 14 to 84. US Bureau of Economic Analysis data reveal a rise in European R&D employment in US affiliates from 66,500 workers in 1989 to 73,100 in 1994, rising to 83,100 in 1999. A recent National Science Foundation report, Moris (2004), furthermore, points out that between 1994 and 1999 overseas R&D employment in US MNC affiliates grew at an average annual rate of 3.9 percent compared with just 0.7 percent in the parent companies, "*an indication of the increasing globalization of innovation and knowledge-based competition*".

4.33 The 2005 UNCTAD World Investment Report provides broader and more detailed evidence on the recent growth in global off-shoring of R&D functions. It points out that for the largest Swedish Multinationals the share of R&D carried out overseas rose from 22 percent in 1995 to 43 percent in 2003, and, for Japanese Multinational corporations, from 2 to 4 percent over the same period. These trends are further confirmed by survey evidence cited in the UNCTAD report.

4.34 Kuemmerle (1999a) distinguishes between "home-base-exploiting" R&D sites (which are associated with traditional FDI, where firms set up overseas to exploit on a larger stage the advantages, such as brand names, that they have already accumulated) and "home-base-augmenting" or technology-sourcing sites[16]. The proportion of technology-sourcing R&D labs in his study rose from 7 to 40 percent over the period analysed.

4.35 What are the implications of the corporation-tax regime for a region's ability to attract R&D functions? There is a strand in the Irish literature that argues that "*the tax incentives for manufacturing in Ireland….inhibit the performance of R&D, since R&D costs can be written off at higher tax rates in the home country*" (from a report by the Circa group to Forfás). Hines (2003) rejects the argument that low Corporation tax rates discourage R&D, but suggests that R&D *intensity ratios* may be reduced because employment and output might be stimulated to a greater extent than R&D. Indeed, it

[16] The former are more likely to be located close to existing factories and important markets, while the latter are more likely to locate close to universities. See also Kuemmerle (1999b).

is likely, he suggests, that low tax rates indirectly encourage local R&D activities on the part of multinational corporations eager to defend themselves against the charge that rents should not be attributed to their operations in low-tax locations.

4.36 This argument is supported by a Wall Street Journal analysis of Microsoft's 1997 allocation of intellectual property to an Irish subsidiary, which "*helped the computer giant shave at least $500 million from its annual tax bill… The subsidiary has … a thin roster of employees…and the software was mostly developed outside Ireland, but the subsidiary …controls more than $16 billion in Microsoft assets*" (Wall Street Journal, November 7, 2005). Though the thrust of the analysis is strongly disputed both by Microsoft and the IDA, the article goes on to point out that expanding R&D operations in Ireland, by pharma-chemical as well as ICT companies, "*are necessary to satisfy IRS rules on moving intellectual property abroad. To do so – and thus have profits from it be taxed abroad – a company must be able to argue plausibly that its offshore unit is at least partly responsible for the innovations*" (*ibid*).

4.37 It is worth noting, finally, that much of the running on Corporation tax issues within the EU today is being made by the European Court of Justice. A detailed study of the implications of these decisions for Ireland, commissioned by the Institute of European Affairs and the Foundation for Fiscal Studies, is close to completion. This study concludes that ECJ decisions, by expanding capital mobility within the EU, will generally operate to the benefit of lower-corporation-tax environments.

Sectoral Destination of FDI Inflows to Ireland Over Time

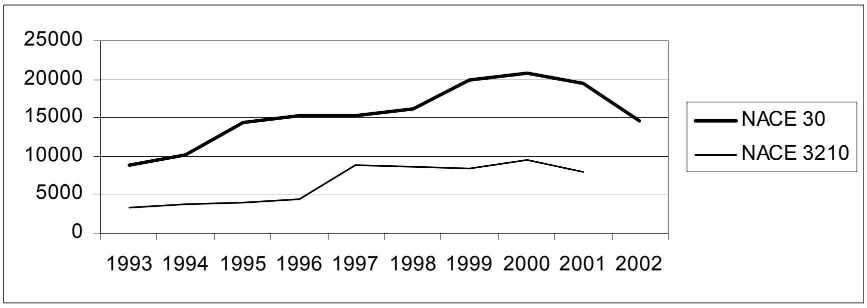
4.38 It is worth emphasising once again that it can take time for a country or region to reap the full potential from the FDI sectors that it attracts. The following paragraphs provide some details of developments over time in a number of Ireland's key foreign sectors: ICT, pharmaceuticals, financial services and call centres more generally (which include some elements of financial services, IT services and other services areas).

Information and Communications Technology (ICT)

4.39 Recently, computer hardware production has been shifting, within Europe, from Scotland and Ireland to Central and Eastern Europe, while electronics component production has also been shifting eastwards – primarily to Asia. Several forms of adjustment have occurred in Ireland: first as hardware assembly firms pulled out, they were frequently replaced by firms operating in related though higher-wage or higher-technology segments (Barry and Curran, 2004), and, second, the assembly firms that remained have tended to shift their Irish operations from assembly into higher value-added non-manufacturing functions such as sales and technical support call centres and logistics (van Egeraat and Jacobson, 2004).

4.40 Computer assembly (NACE 30) and electronic components production (NACE 3210) began in Ireland in the 1970s, and both sectors experienced serious job-losses and plant closures from the late 1990s onwards, as seen in Figure 4.3. Note that NACE 3210 records higher wage levels in Ireland than NACE 30, so that the degree to which it grows faster represents a movement up the value chain within computer hardware[17].

Figure 4.3

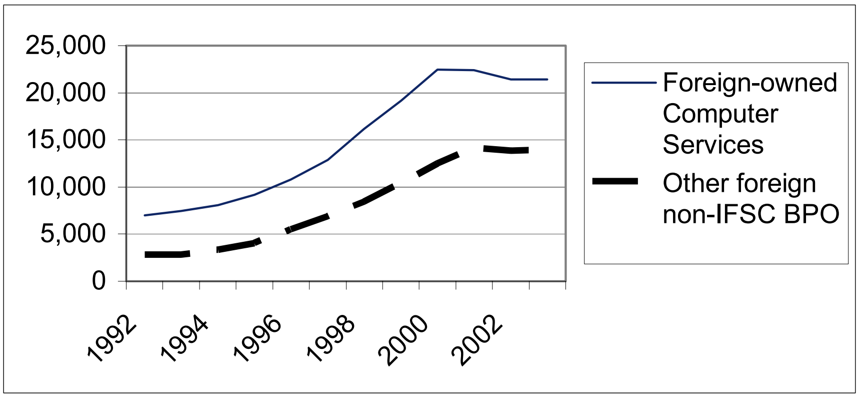


Source: Irish Central Statistics Office

[17] Since about one-third of current employment in Ireland in the former sector is in Intel, it is of interest to note the continuing commitment of the company to the development of its Irish operations.

4.41 Unsurprisingly, developments in internationally-traded services have been more positive than in hardware in the years following the dot-com collapse. Figure 4.4 shows that employment in Software and Other Computer Services remained constant between 2000 and 2002 while employment in other business processes off-shored or outsourced (BPO) services, excluding those associated with the International Financial Services Centre in Dublin, grew by 3,500 from an initial level of around 23,400 in the year 2000.

Figure 4.4



4.42 Many of the adverse developments in ICT sub-sectors are associated with the global downturn in ICT rather than any shift of the sector out of Ireland. The main segment that appears to be shifting is computer assembly and peripherals. As recently as June 2005, for example, the international press reported that Dell was on the verge of choosing Poznan in Poland as a location for its first European manufacturing plant outside Ireland. The new base would be likely to be initially positioned to manufacture lower end products, but Dell Ireland would compete against its Polish sibling for investment and product manufacturing contracts within the group.

4.43 As hardware shifted east, there has been some restructuring into related services sectors. Examples are Digital Electronics Corporation (DEC), Apple, Intel and Dell. When Digital closed its manufacturing plant in Galway in 1993, it created new opportunities for the pool of skills and professionalism within Digital's workforce. The continued operation of Digital's European Software Centre, subsequently absorbed by Compaq, also played an important role. The most significant outcome of the closure of Digital was the establishment of Galway Technology Centre, the provision of additional training support and advisory services and funding for business start-ups, including via the conversion of tax on redundancy pay into a seed capital grant. No single measure could be identified as responsible for the subsequent growth of Galway's software cluster, but business support, training and "incubator" facilities together with informal networks among key ex-Digital staff all played their part. Nor did all ex-Digital staff enter the software sector. It required some high-profile successes, however, exemplified by Toucan Technology, to create the momentum necessary to encourage other start-ups and attract major new investors such as Siebel Systems while at the same time persuading existing ones such as Nortel and Compaq to expand their operations.

4.44 These investors have in turn generated local supply chains, and have had to co-operate as well as compete for skills, infrastructure and market opportunities, both with each other and with the simultaneous emergence in Galway of Europe's leading medical instruments cluster, which is anchored by the presence of Medtronics AVE and Boston Scientific.

4.45 By 2001, of the 1,200 workforce remaining in Apple's operations in Ireland, only 400 were involved in manufacturing. European customer support services and finance functions had recently been transferred to Ireland, which also served as a logistics centre for the company. Local management was responsible for sourcing and logistics etc and acted as landlord for R&D groups engaged in localisation and software – the latter managed from the US. Quite a number of people made redundant by Apple in the late 1990s went to EMC (storage hardware manufacturing) and Flextronics (although this company closed down shortly afterwards and later began production in Hungary).

4.46 Gateway's Irish operations closed in summer 2001 when it decided to refocus on the US market. Telecom suppliers were hopeful that Gateway would outsource its technical support services to an Irish company. At least 15 companies – based in the Republic, Britain and Europe – contacted Gateway to express interest in providing these services. Ultimately Gateway signed an outsourcing deal with a Dublin-based Canadian-owned firm, Clientlogic, that saved about 150 technical support jobs[18]. Though demand for customer support services would fall over time because of Gateway's decision to exit the EMEA region, Clientlogic expected to be able to then shift these workers to other client accounts such as British Telecom, Boots (Chemists) and Dublin-based electronics group Palm. A further 250 Gateway staff indicated that they wished to take up FÁS evening classes, in a range of skill areas. Many of these – a number of whom were veterans of previous redundancies by Amdahl, Motorola and others – secured employment within months. These positive developments for those with technical and managerial skills should not mask the fact that production-line operatives, who tended not to have tertiary-level educational qualifications, fared less well.

4.47 *The Irish Times* reported, in June 1999, that some 750 Intel employees involved in assembly functions were informed that their jobs would be eliminated shortly as the company upgraded its Irish operations to produce the latest microchips. Each of the assembly staff were offered retraining and redeployment to allow them to transfer to the new production process, for which the company estimated that an additional 1,000 employees were required. Workers transferring from the assembly facilities were to have their existing pay grades preserved.

4.48 In 2001, Dell announced a voluntary redundancy package for 200 of its 4,000+ employees at its Limerick operations, the first in its 10-year history in the city. The firm's 1,200 employees in Bray and Cherrywood, Dublin, were to be unaffected. The following year, however, the firm announced the creation of between 100 and 200 full-time jobs at its call centre in Bray, Co Wicklow. Many of these were to be in highly skilled positions at Dell's new multilingual centre that offers technical support services for the firm's server and storage products.

---

[18] The deal between Gateway and Clientlogic mirrored that agreed by Motorola and Celestica the previous year when the two firms signed an international alliance. Under this agreement, most of the Motorola staff transferred to the electronics manufacturing firm.

Pharmaceuticals

4.49 In this sector, security of supply far outweighs concerns about labour costs, making regulatory compliance of key significance. While a number of other EU countries now offer a similar Corporation tax environment and an abundance of workers with the mid-level skills required for pharmaceutical processing plants, they lag behind in this key area in which Ireland has made great strides over the last ten years. This is exemplified by Ireland's sizeable stock of FDA-approved plants. The significance of *local or regional* regulatory capacity is further suggested by the fact that the pharmaceuticals sector in Ireland is clustered in a small area, around the city of Cork.

Financial Services

4.50 The idea for the IFSC originated with businessman Dermot Desmond and Michael Walsh, a Professor of Finance and Banking at University College Dublin. They influenced then Taoiseach Charles Haughey to set up the IFSC Committee in 1987, which drew together the relevant government departments and private sector interests.[19] In addition to the preferential Corporation tax rate (of 10 percent, at the time), IFSC companies could avail themselves of Ireland's network of double taxation agreements, as well as other incentives including: no withholding tax on interest paid to non-residents; tax exemption for collective investment/life assurance funds; no net asset value tax on funds; no municipal taxes; double rent allowances for certain IFSC tenants; first year depreciation allowance on certain items of capital expenditure.

4.51 The development of the IFSC involved a whole spectrum of governmental, non-governmental, and private institutions. In addition to purchasing flagship office buildings in the Dublin Docklands, the Irish banks supported the development of the IFSC by collaborating with the IDA to attract foreign investors. The government bodies involved included relevant ministries and regulatory authorities, alongside specific bodies dedicated to the international financial services sector, such as the Financial Services Section of the IDA and the IFSC Clearing House Group. Trade

[19] A detailed description of the origin of the IFSC can be found on the website of Finance Dublin at www.financedublin.com/supplements/15th_anniversary.php.

associations represent different groups of financial firms and professionals or in case of the Financial Services Ireland (FSI) aim to represent the totality of the financial services industry. An institution dedicated to the task of developing international financial services in Ireland, which is central to communication between government, financial services companies, and financial trade associations is the IFSC Clearing House Group (CHG). It arose from the original IFSC Committee established in 1987, and is chaired by the Secretary General of the Department of the Taoiseach. The CHG functions through permanent sectoral Working Groups e.g. for banking, insurance or investment funds as well as ad-hoc groups e.g. for media. It gathers representatives of different government bodies, including the Dublin Docklands Development Authority and the IDA, representatives of trade associations and experts from financial services firms. These groups comprise a dynamic network that facilitates the recognition of changes in the global environment and ensures a timely response to them. An interesting recent development has been the creation of the Irish Securitisation Forum, officially launched in November 2005 and jointly supported by the Irish Bankers Federation (IBF) and Financial Services Ireland (FSI) and chaired by a senior figure in the Irish Stock Exchange.

Call Centres

4.52 Sixty companies, mainly from the US, use the RoI as a base for their European call centres, of which Ireland accounts for one third of the European total. Call-centre employment stands at a level somewhere between 12,000 and 19,000[20]. On the basis of the latter number CM Insight (2004) calculates that Ireland has the highest proportion of call centre staff of any European country as a proportion of its working population, at 3.6 percent, compared to its nearest competitors, the UK at 2.8 percent and the Netherlands at 2.5 percent. In the assessment of UNCTAD (2004, p 161) Ireland is also the leading location for shared service centres among developed countries.

[20] The lower number comes from UNCTAD (2004, footnote 44, p 179) and the higher one from Datamonitor (2002).

4.53 There are some indications that the Irish call-centre sector is more high-skill than that of the UK. Thus CM Insight (2004, p160) finds that Ireland attracts more high-value, less price-sensitive contact centre activity than other offshore locations. It notes the substantial element of technical and software support in the Irish sector as well as a relatively high ratio of team leaders to agents, the latter suggesting a focus on quality and more complex (less scripted) contact centre functions.

4.54 One further point to note with respect to call-centre activity is that this sector requires a substantial number of foreign-language speakers. Many young foreign nationals who take up these positions are attracted to Ireland and the UK in order to perfect their English-language skills.

Some Implications for Northern Ireland

4.55 A more detailed analysis of the implications of aligning the Corporation tax rate in Northern Ireland with that in the RoI is presented in the next section of this study but some interesting insights can be gained by considering a scenario where Northern Ireland will, after pulling level with the Republic on the tax rate, be identical in all other aspects to the Republic as well. In other words, one could assume that all the characteristics that have been identified in the literature as attracting FDI, and that are particularly important for attracting FDI into the Republic of Ireland (some of which were discussed in Section 1), are also present in Northern Ireland. If this were the case then one may expect that Northern Ireland will have the same level of inward FDI as the Republic – appropriately scaled to reflect Northern Ireland's smaller size compared to the Republic.

4.56 Based on this scenario, a simple calculation can be made based on existing data on inward FDI in the Republic. For example, in 2005, IDA Ireland reports that inward FDI (both new and expansions) generated 12,623 jobs in manufacturing and services in the Republic. If Northern Ireland were similar in all respects including the tax rate we would expect it to have similar levels of job creation. However, in order to reflect its smaller size the expectation would be to have 2/5th of the level of the Republic. Hence, in this scenario we would expect that FDI in Northern Ireland would generate 5,049 jobs (2/5th of 12,623). However, in 2005, Invest NI reports that new jobs generated by foreign multinationals in the financial year 2004/05 amounted to only 3,467 (and averaged only 2,200 over the period 2002/03 to 2004/05), suggesting a large growth potential if Northern Ireland were to follow the Republic.

4.57 Another important question to ask is what the quality of the inward FDI would be like. In other words, which sectors and activities would attract the new inward investment? While the aggregate evidence that comes up with the tax elasticities is silent on potential changes in the sectoral distribution of the new investment, it is again reasonable to use the Republic as a benchmark. If FDI in Northern Ireland were similar, then we could also reasonably expect it to show a similar sectoral distribution.

4.58 Table 4.3 shows the current (2005) sectoral distribution of new job creation by foreign-owned firms in Northern Ireland and contrasts this with the 2005 sectoral distribution in the Republic of Ireland, as reported by IDA Ireland. It is notable that, if NI were to move to the RoI sectoral distribution then one would expect new investment (and the associated employment gain) mainly in electronics and engineering manufacturing as well as financial and internationally traded services.

Table 4.3: Sectoral Distribution of New Job Creation by New Greenfield and Expansion Projects in 2005

Sector	NI Current Sectoral Distribution (%)	RoI Sectoral Distribution (%)
Chemicals	3.6	9.2
Clothing & Textiles	3.3	0.7
Food	1.3	0.7
Metals & Engineering	14.4	31.5
Misc Manufacturing	1.4	2.2
International Services	16.6	42.8
Financial Services	59.5	12.8
All Sectors	100.0	100.0

Source: Data available from Invest NI and IDA Ireland

4.59 If changes in the tax rate do indeed affect the level of inward FDI, then the presence of a new and larger stock of multinationals may also be expected to have positive benefits for domestic firms in the economy. For the case of the Republic of Ireland Görg and Strobl (2002, 2003) find that the presence of multinationals in an industry fosters entry of new domestic firms, and also increases the probability of survival of existing domestic firms. The main rationale for these effects is that multinationals generate new markets for new sub-suppliers, and the increased availability of inputs also encourages new entry by final good producing domestic firms. Furthermore, technology transfer (or spillovers) from multinationals to domestic firms can help firms to survive. Moreover, evidence by Ruane and Ugur (2004) for the Republic of Ireland and Girma *et al.* (2001) for the UK suggests that domestic firms can learn from multinationals and improve their productivity levels or growth.

4.60 As discussed in Section 3 above, agglomeration economies are an important attraction to foreign multinationals. In a detailed analysis of location patterns of foreign multinationals in Ireland, Barrios et al (2006) find that multinationals particularly in high tech industries tend to locate in urban centres to avail of knowledge-related spillovers from the diversity of industries in general and the presence of other foreign firms in particular in that location. These factors, while still important, are less significant for multinationals in low tech industries.

4.61 Agglomerations or clusters are appropriately defined over relatively small geographic areas such as cities or travel-to-work areas[21]. The appropriate regional categorisation for Ireland is at the Regional Authority or EU NUTS 3 level. There are eight Regional Authority areas in Ireland, though Dublin and the Mid East are generally aggregated since the latter is within the Dublin catchment area. Table 4.4 shows the proportion of the country's manufacturing and market-services employment in the main regions – along with the main city in each region – and the regional employment proportions in sectors of interest.

[21] Jaffe et al (1993), for example, using data on patent citations, find that most spillovers occur within a metropolitan area, though some spread to the encompassing (US) state. Henderson (1986) shows that, within cities, output per labour-hour is higher in firms that have other firms from the same industry located nearby. Glaeser et al (1992) and Feldman and Audretsch (1999) are also based on metropolitan areas, since, in the words of the former, "if geographical proximity facilitates the transmission of ideas then we should expect knowledge spillovers to be particularly important in cities". Braunerhjelm and Borgman (2004), in an analysis of cluster effects in Sweden, work at the level of the 70 component regions of the country, and show that concentrations of knowledge-based industries within these relatively small regions exert an impact on regional growth over and above the industry effect itself. Finally, Feldman (1999), in a review of the empirical literature, finds that knowledge spillovers, whether inter or intra industry, are strongly bounded in space.

Table 4.4: Sectoral Employment Distribution across Regions in Ireland

	Manufacturing & Utilities	Market Services	Chemicals	Pharma	Office & Computing Equipment	Electrical & Electronic	Medical & Precision Instruments	Foreign Software	Domestic Software
Dublin & Mid-East (Dublin)	35	52	37	39	54	32	13	78	87
Mid-West (Limerick)	10	8	10	6	21	20	12	≈5-6	3
South-West (Cork)	15	13	24	25	18	18	7	≈5-6	5
West (Galway)	10	7	9	13	4	14	32	≈5-6	2
Rest of Country	30	20	21	17	3	16	36	≈ 5	3

Notes: Foreign software refers to top 60 foreign companies; domestic software to the leading 126 indigenous companies. These firms comprise the vast bulk of employment in the two segments.

Sources: CSO (QNHS, Q1, 2000) for Manufacturing & Utilities and Market Services; Crone (2002) for Software.

4.62 One way to measure the extent of sectoral clustering is to compare a region's share of a particular manufacturing sector to its share of total manufacturing employment, and its share of software employment relative to its share of all market services[22]. This suggests clustering of medical and precision instruments in the West, of office and data processing (ODP) and electrical and electronic equipment in the Mid West, of chemicals (and particularly pharmaceuticals) in the South West, and of ODP and software – particularly domestic software – in the Dublin region. It is apparent from the table furthermore that the concentration of the software sector is much greater than for any of the manufacturing sectors, with the Dublin software cluster comprising virtually the entire industry. Given the proximity of Northern Ireland and particularly of the Belfast industrial area to these clusters in Dublin and the Mid West it appears a reasonable assumption that the existing clusters can expand into Northern Ireland, under the assumption that with the reduction in the corporate tax rate the locations are otherwise identical to each other.

[22] Geographers refer to these measures as regional location quotients.

5. ANALYSING THE IMPACT OF A DIFFERENTIAL CORPORATION TAX ON THE NORTHERN IRELAND ECONOMY

Introduction

5.1 This section of the report turns to the difficult task of estimating the potential impact of reducing the Corporation tax rate in Northern Ireland. At present the region is bound by the uniform Corporation tax structure applying in the UK with small companies facing a statutory rate of 19 per cent on taxable profits and large companies facing a rate of 30 per cent. The objective is to examine what might happen to the local economy in terms of output and jobs if these rates were taken down to the 12.5 per cent rate applying in the RoI. In addition it is necessary to make some assessment of the overall cost to the exchequer of such a policy shift since existing companies in Northern Ireland will enjoy a windfall reduction in the tax on their profits and this loss of tax must be carried somewhere in the system.

5.2 Simulating the effect of policy change of this type presents a wide range of difficulties. For a start Northern Ireland's experience of FDI has almost entirely been in the context of a grant system through Selective Financial Assistance. This is of very little use when trying to look at what might happen under a radically different set of financial instruments. In short we cannot rely on the past as any reliable guide to the future. Instead it is necessary to examine the behaviour of FDI flows in countries where a low Corporation tax regime is the primary instrument for attracting foreign investment and make what adjustments are possible for any differences with Northern Ireland. The obvious candidate for this sort of benchmarking is, of course, the RoI. Since the analysis involves forecasts, that is, it looks to what might happen in the future, it is also necessary to have some procedure for estimating the future course of FDI flows both world wide and more specifically for the benchmark country.

5.3 The analysis must also take account of the many and complex ways that a change to Corporation tax and the subsequent effect on FDI flows will feed through the local economy. This requires the use of a properly estimated model of the Northern Ireland economy.

5.4 The modelling work reported in this section was carried out by Regional Forecasts Limited (RFL) who constructed a spreadsheet model to capture most of the major impacts. This tax model is constructed at 26 sector level and produces results for:

- Total employment (employees plus the self employed)
- Employees (by sector)
- Gross Value added (by sector)
- Unemployment
- Population (total and working age)
- Migration
- Tax revenues (Corporation tax plus other major taxes)
- Public Expenditure costs

The model is based primarily on published official statistics[23], RFL's forecasts and a set of plausible assumptions all of which are set out below. The analysis provides a first approximation forecast of the impact of a change in Corporation tax based on robust assumptions about the future. It does not claim to cover the full complexities of the tax system nor the full range of marginal impacts that are likely to flow from a change in the tax system (more complex models would need to be used for this purpose).

5.5 A key benefit of using this model is that the results are consistent with RFL's Northern Ireland Policy Simulation Model (NI_PS). The NI_PS model is a recently developed model for the Northern Ireland economy, funded by the Department of Enterprise, Trade and Investment, Department of Finance and Personnel, Department of Employment and Learning and the Office of the First Minister and Deputy First Minister. It has been utilised by central and local government in Northern Ireland in recent years for a range of research projects. The model also has the flexibility to adjust the assumptions made and generate results for alternative scenarios.

[23] For consistency with UK modelling, and for a more complete sectoral coverage, Regional Accounts is used as the primary source of GVA and wage data rather than the Annual Business Inquiry. This data is deflated by RFL using official GDP deflators and scaled to the UK total.

5.6 The current (Autumn 2006) forecasts from the NI_PS model are used as a base case assuming unchanged tax policies. The new spreadsheet model generates an alternative scenario based on a halving of the effective rates of Corporation tax. The broad approach involves:

- Projecting increases in foreign direct investment (FDI) into NI at similar rates to that experienced in the Republic of Ireland (ROI) over recent years and expected future FDI flows into Europe. The sectoral distribution of gains is also based on the ROI experience. FDI includes both companies new to NI and expansions by foreign-owned companies already in NI.

- Projecting additional output and employment in locally owned companies as a result of reinvestment resulting from lower Corporation tax.

- Calculating knock-on impacts in the wider economy.

- Assessing the impact of all of these changes for tax revenues including Corporation tax but also income tax, national insurance, benefits and incapacity benefits and VAT.

- Calculating the impact on employment, unemployment, inactivity and migration.

- Assessing the implications of labour market and demographic changes for public expenditure.

- Calculating an overall Exchequer fiscal balance taking into account all of the estimated changes to tax revenue and to public expenditure.

The spreadsheet model is designed to be flexible and easy to adjust and to test scenarios. Forecasts are provided annually to 2030.

Main Assumptions

5.7 All modelling whether for forecasting future developments or for simulating the effects of changing one or more policies has to incorporate a number of assumptions about the state of the world and other factors that could be important for the analysis. The major assumptions that are used to analyse the impact of a differential rate of Corporation tax in Northern Ireland and the underlying rationale for each are set out below:

FDI flows: Predicting future flows of FDI whether at the global level or for a particular country is an extremely difficult exercise. All of the major sources of information on FDI stocks and flows including the forecasts from the Economist Intelligence Unit and Columbia University have been examined. The forecasts for Ireland which is the benchmark for this exercise are broadly stable over at least the next decade. The model therefore assumes that NI can attract a pro-rata share of RoI's FDI flows after a short period of time, given the same corporate tax incentives. This may be regarded as optimistic but the whole purpose of moving to this new policy is to galvanise the effort to attract FDI and to re-orient the entire thrust of economic development to this end. Much therefore depends on the response of the economic development agencies and the relevant government departments. It will be their task to tackle any constraints such as skill shortages that may stand in the way of achieving this target. Moreover, as will be seen later, the sensitivity of the overall result to this assumption may not be as great as some would expect.

Tax assumptions: the lack of reliable data for regional tax revenues means that alternative methods have to be employed to estimate these values and that in turn necessitates several assumptions. UK ratios of tax to wider economic variables (such as UK Corporation tax to UK Gross Operating Surplus data) have been used as the principal method of estimating the Corporation tax take in Northern Ireland. Overall this probably produces figures that are too large because of the distorting effect of the South East and in particular the City of London on the UK figures. However, on the principle of erring on the side of conservatism when dealing with areas where very little information is available, this is the base value for Corporation tax used in the model. If at a subsequent date the Department of Finance and Personnel are able to provide more reliable official figures these can be substituted. The tax credits system is not separately modelled (this includes child tax credit) and may have influenced the scale of impact.

Profit shifting and transfer pricing: RFL have assumed that UK firms in other UK regions cannot redistribute their production to enjoy a lower Corporation tax rate in NI. Diversion of activity from GB to NI would be beneficial for NI but would result in a considerable loss of revenue for the UK exchequer overall as the firms would pay less Corporation tax without necessarily increasing their levels of activity within the UK[24]. The same assumption is made for pricing – i.e. it is assumed that UK firms in other UK regions do not simply put profits through NI 'virtual' offices. Although this would improve GVA for NI there would be no 'real' impact on the local economy (in terms of local jobs and wages) even though there would be an additional tax take locally but a proportionately larger tax loss for the UK exchequer. In reality this is a difficult issue to police and some leakage of profit to NI is possible but the results given in this report are not dependent on profit shifting within the UK. Transfer pricing is assumed to be possible only in **new** FDI flows, all of which are assumed to be net gains to the UK.

Selective Financial Assistance (SFA) remains: the model assumes no change to policy beyond an alternative Corporation tax rate. As such, Selected Financial Assistance (SFA) remains. SFA is seen as a significant policy tool for Invest NI and in their opinion has proven to be important for attracting new firms and supporting existing firms. If SFA were to cease under a policy of reduced Corporation tax this would have implications for the base projections upon which the NI_PS model is based. How important these effects would be depends on the deadweight element in existing SFA support. If this is small the estimated FDI inflows would be lower but if it is high this effect would be significantly reduced. A study of SFA effectiveness in the UK, including in Northern Ireland sponsored both by the Department of Trade and Industry and the Department of Enterprise, Trade and Investment is underway and will in time be able to shed additional light on this issue.

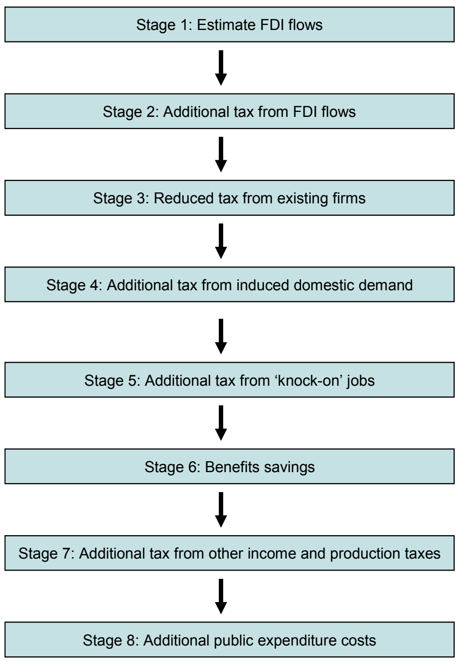
[24] If lower tax facilitates faster growth in the firm through re-investment into better equipment or staff, the loss may not be as significant. However, it would have a significant detrimental effect on the region from which the re-location occurred.

Data limitations: many of the official data sources used in this model have in the past contained significant margins of error. While every effort is taken to avoid incorporating errors in the model those arising from errors and discrepancies in official series cannot be completely eliminated.

Structure of the Analysis

5.8 There are eight stages in the process for assessing the impact of a Corporation tax change on the Northern Ireland economy, these are set out in Figure 5.1 below and described in more detail in the sections that follow.

Figure 5.1: Stages of Assessing Corporation Tax Implications



Stage1: Estimating FDI Flows

5.9 In order to make estimates of potential FDI flows for Northern Ireland under a new Corporation tax regime it is first necessary to obtain data for FDI flows globally and in the RoI, the benchmark country. FDI Data used in this analysis has been sourced from

LocoMonitor™ (www.locomonitor.com), a global database of FDI projects researched and maintained by OCO Consulting Ltd, Belfast (www.ococonsulting.com).

5.10 Data on the number of projects and jobs promoted was provided for 5 years from 2002 to 2006 by SIC sector for; Northern Ireland, the rest of the UK, the Republic of Ireland, and developed Europe. The data includes expansions of existing FDI companies (the NI projections were therefore used to cover both new 'greenfield' FDI into NI and expansion of existing firms).

5.11 Jobs promoted in developed Europe were projected forward by sector based on assumed annual growth rates applied to a three year average of job promotion data. The RoI's share of developed Europe's sectoral job promotions in 2007 is estimated as an average of sectoral shares in the previous 4 years. After 2007, the RoI's share is held constant at 2007 levels[25].

5.12 Northern Ireland's projected level of job promotions are estimated relative to the RoI performance pro-rata on working age population (this includes all sectors except agriculture, utilities, construction, hotels and distribution and the public sector which it is assumed are not sensitive to changes in the tax regime and have no new FDI[26]). To convert jobs promoted into an estimate of jobs created, Invest NI's accepted ratio of 75% of job promotions coming to fruition over a three year period was employed.

5.13 The model assumes that potential new investors will take time to make, and implement, investment decisions. It is, therefore, sensible to impose a timing lag on NI achieving a pro-rata share of RoI's projected jobs (Table 5.1). The adjustment period is set out in Table 5.1 below. It is fairly steep consistent with the presumption that maximum effort will be put into exploiting the new tax regime from the outset. A longer run-in period is of course possible, in which case the benefits of the policy change are delayed.

[25] No trend was apparent to make a more sophisticated projection.

[26] This approach is only significant for retail. The other sectors have no reported FDI.

Table 5.1: Percent of Estimated FDI Flows Realised by Year

	2007	2008	2009	2010 Onwards
NI's Realised Share of Estimate Job Creation	25	50	75	100

5.14 Although this method of estimating potential FDI flows to Northern Ireland following a change to the Corporation tax regime is relatively straightforward and the necessary assumptions are transparent it is vulnerable to the charge that it neglects factors other than tax as attractors of FDI. Earlier sections of this report have listed many possibilities such as the availability of skills in the workforce and the quality of the education system. The question in the present context is whether there is a sufficiently large gap between these endowments in the RoI and in Northern Ireland to overwhelm the convergent effects of aligning Corporation tax rates between the two areas. There are pluses and minuses on both sides. The RoI has many years experience of meeting the needs of a sophisticated FDI flow which naturally gives it an advantage but on the other hand their success in itself is producing problems such as rapidly rising labour costs which is undermining competitiveness from a different direction. The difficulty is that many of these effects are nearly impossible to quantify in any meaningful way and there is no obvious way of weighing them up to come to a conclusion that is robust. Based on a simple force field analysis of competing factors in the RoI and Northern Ireland, and assuming future political stability in the latter, it is difficult to see that other than in the area of tax there is a decisive and enduring difference between the two territories from the view point of a prospective investor. In the absence of a compelling argument that such differences exist and are decisive the assumption of a pro rata share of FDI flows is not unreasonable[27].

5.15 In summary the method used to allocate new FDI flows to Northern Ireland following a change to the Corporation tax rate does not take account of the current structure of FDI flows because these are the product of an entirely different fiscal regime. The new estimates are derived from the experience of the RoI market where Corporation

[27] Alternative methods of estimating FDI shares for Northern Ireland were investigated including those based on exploiting FDI / Corporation tax elasticities based on values derived from the academic literature. These produced implausibly sharp and large shifts across sectors and it proved impossible to align the outputs of this analysis with the input requirements of the tax model.

tax is low. While it is accepted that tax is not the only factor affecting FDI, it is assumed to be the dominant factor to the extent that others do not differ to anything like the same degree. In addition it is assumed that a change in the tax rate will not be the end of the matter but a catalyst that will refocus the entire industrial development effort. Thus if there are deficiencies in areas such as skills, policy can be changed swiftly to address such issues when a new flow of FDI is in prospect. All forecasts are, of course, vulnerable to sudden shifts in circumstances outside the control of any country and it has to be assumed that the world background remains broadly neutral during the course of this analysis.

5.16 The results of the FDI flow forecasts are shown in Table 5.2 below. It is clear that Business Services is the key sector for investment accounting for about 90 per cent of long term job flows. This is absolutely consistent with world trends for the more developed countries where manufacturing is increasingly focusing on very high value products or those where technical conditions or patent protections ensure an enduring degree of market dominance. New job flows in traditional manufacturing sectors are modest and certainly not sufficient to offset losses among existing companies. The method used to produce these estimates suggests new job creation from FDI at around 5000 per annum in the longer term.

Table 5.2: Cumulative New FDI Jobs Created in Northern Ireland

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016-2030 (Average Job Creation pa)
Manufacturing – Food, Drink & Tobacco	10	30	80	150	230	320	400	480	560	70
Manufacturing – Chemicals	30	110	260	470	720	1,000	1,260	1,520	1,770	210
Manufacturing – Electrical & Optical Equipment	10	60	130	240	370	520	650	790	920	110
Business Services	250	1,020	2,570	4,950	7,910	11,210	14,610	18,080	21,640	4,350
Other	10	30	70	130	200	270	350	420	490	60
Total – Cumulative	310	1,250	3,110	5,940	9,430	13,320	17,270	21,290	25,380	4,790
Total – Annual Job Creation	310	940	1,860	2,830	3,490	3,890	3,950	4,020	4,090	4,790

Notes: Business Services includes a wide range of activities including Head Quarter functions and call centres etc. Rounded to nearest 10.

Stage 2: Additional Tax from FDI Flows

5.17 Once estimates of FDI job flows are made as described above, it is necessary to convert these to the equivalent levels of Gross Value Added. This is achieved by applying the appropriate estimate of productivity per job[28]. Productivity in new FDI companies is assumed to be twice the NI average in most sectors (this is based upon data provided for the NI_PS model by DETI on GVA per employee in new foreign owned firms). Higher productivity multipliers are also applied in certain sectors as they are likely to attract the profit sensitive elements of production (see Table 5.3 below). This is the only element of the analysis which allows inherently for some element of transfer pricing. The FDI projections also include existing foreign owned firms. New investment in these existing foreign-owned firms shares the same assumptions about productivity. However, no allowance has been made for sectors with no projected FDI flows (from Stage1 above) to increase jobs[29]. In sectors in which NI has few foreign owned firms the important assumption is that most new activity is in firms that are new to NI.

Table 5.3: Sectoral Productivity Multipliers

	Productivity Multiplier
Manufacturing – Chemicals	10
Manufacturing – Electrical & Optical Equipment	4
Business Services	4
Rest of Economy	2

5.18 A proportion of the additional GVA is allocated to wage costs. This is estimated using sectoral ratios of wages to GVA from Regional Accounts. Interestingly, NI has a

[28] GVA per employee has been estimated for this model to remove the impact of self employed. This is done by removing self employed estimates by sector from total employment estimates and assuming GVA is on average 76% of sectoral average. This assumption is used as it produces the overall figure for Gross Operating Surplus for NI in 2003 (from Regional Accounts) which is roughly analogous to self employment income.

[29] The weakness of this approach is best typified by the transport equipment sector where NI has a significant foreign owned component but no FDI flows are projected in this sector. Thus the sector does not expand despite the new tax regime. However analysis of initial data suggests profits in foreign owned firms may be relatively low (providing average wages are assumed). The 'induced' effects discussed later do not apply to foreign firms. To do so would risk double counting.

higher proportion of GVA in non employment costs – most probably due to lower wages. The obvious inference from this is that profits are higher, although higher self employed income may also be a reason. This is set out in the table below.

Table 5.4: Proportion of GVA in Non-Wage Costs, 2003

	UK	NI	Difference
Agriculture, hunting, forestry & fishing	67.9	77.9	10.0
Mining & quarrying	25.6	30.3	4.7
Manufacturing	25.4	33.6	8.2
Electricity, gas & water supply	70.2	69.6	-0.5
Construction	50.0	57.2	7.2
Wholesale & retail trade	37.1	43.6	6.5
Hotels & restaurants	31.9	39.5	7.6
Transport, storage & communication	32.1	36.5	4.4
Financial intermediation	56.3	61.8	5.5
Business services	58.3	68.5	10.2
Public administration & defence	14.2	17.4	3.2
Education	7.4	4.5	-2.9
Health & social work	19.2	13.0	-6.3
Other services	38.1	41.9	3.8
Total	35.9	37.9	1.9

Source: Regional Accounts wage costs are 'compensation of employees'

5.19 The wage cost estimates described above provides a wage per employee in each sector irrespective of ownership. For foreign owned firms this is factored up by 10% for future flows in all sectors. 'Surplus' GVA is calculated as total additional GVA minus the wages element. This approximates to profits. Using UK tax data (from Public Sector Finances publication) the UK's Corporation tax is expressed relative to the same UK 'surplus' to get a ratio of tax to GVA surplus. This ratio is summarised in Table 5.5 below for recent years, and appears to vary cyclically.

Table 5.5: Corporation Tax as a Proportion of 'Surplus' GVA

	2000	2001	2002	2003	2004	2005
Total GVA (£m)	840,980	882,750	930,300	985,560	1,044,170	1,087,000
Surplus GVA (£m)	308,800	318,560	342,900	368,670	395,450	411,710
Corporation Tax Take (£m)	33,000	33,510	28,900	28,550	31,170	37,850
Corporation Tax as a % of Surplus GVA	10.7	10.5	8.4	7.7	7.9	9.2

Source: Table 2.2 Blue Book 2006, Public Sector Finance, August 2006

5.20 The cyclical behaviour of this proportion is possibly driven by significant profits from the 'City' in London which raises the Corporation tax to GVA surplus rate. The model uses the 2005 figure as the basis for projection. Corporation taxes are assumed to be 9.2% of 'surplus' GVA. UK Corporation tax receipts are projected to rise to £49bn in 2006/07, giving an estimated return of over 10. We have assumed that this included significant additional profits from the finance sector, and hence is of less relevance in calculating a ratio for NI. This rate is halved to simulate the move to a lower rate of Corporation tax as a first approximation

5.21 It is important to understand why this somewhat circuitous route to estimating the Corporation tax take in Northern Ireland has been necessary. Prior to 1998, estimates of all of Northern Ireland's shares of the major UK taxes were published each year as part of the accounting for financing public expenditure in the region (the gap between the tax take plus local rates was made up by a 'Grant in Aid'). In preparation for devolution, however, the system was changed and no separate tax estimates are published. Even with the previous system the calculations were always approximate since Inland Revenue (now Revenue and Customs) administrative systems are not geared to producing regional data. The situation with Corporation tax is particularly difficult since tax is often paid for a group of geographically dispersed companies at a single point. There are therefore no reliable and public estimates of the actual Corporation tax take in Northern Ireland.

5.22 On balance the method used to calculate Corporation tax in Northern Ireland probably overstates the actual amounts. About 96 per cent of firms in the region are small and pay at the 19 per cent rate. However, the remaining 4 per cent are responsible for the bulk of the tax paid. The relative importance of the self employed and the take up of tax allowances between regions can also distort the figure. Finally, the model assumes that FDI firms pay wages that are 10 per cent above the sector average and variations in this premium can also alter the tax estimates.

5.23 The estimates of additional tax revenue from new FDI flows as a result of changes to Corporation tax are summarised in Table 5.6 below. The main points to note are that additional revenue from FDI flows grows slowly in the initial years as firms take time to react to the new rate. When the model 'settles down' the long run return is around £54m per annum on average. This results from 4,800 jobs, an approximate Corporation tax per worker of £11,000.

Table 5.6: Additional Tax Revenue from New FDI (£m 2003 prices)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016-2030 (Average £m pa)
Manufacturing – Food, Drink &Tobacco	0	0	0	1	1	1	2	2	3	1
Manufacturing – Chemicals	1	4	9	18	29	41	54	67	81	23
Manufacturing – Electrical & Optical Equipment	0	0	1	2	3	5	7	9	11	7
Business Services	1	5	12	23	36	52	67	83	100	22
Other	0	0	0	0	1	1	1	1	2	1
Total – Cumulative	2	9	23	44	70	100	131	163	197	54
Total – Annual Tax Revenue	2	7	14	21	26	30	31	32	34	54

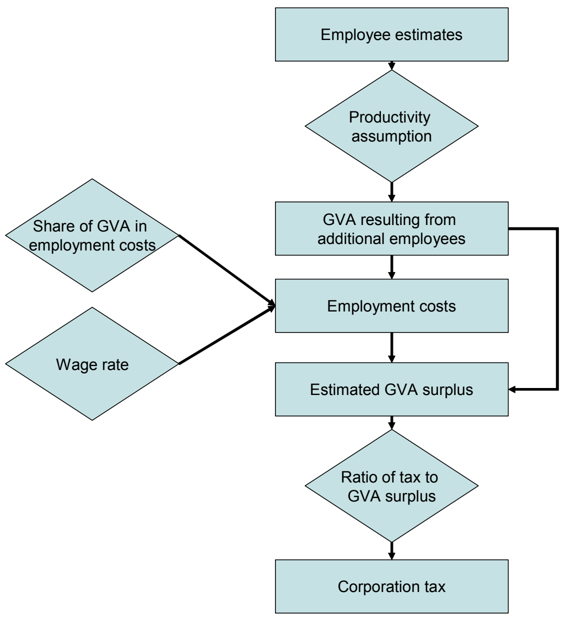
*Note: The FDI flows data on which these projections are based include expansion of existing foreign owned firms. This additional tax relates to **both** new FDI flows and expansion of existing FDI in NI.*

Stage 3: Reduced Tax from Existing Firms

5.24 Cutting Corporation tax means reducing tax bills for all companies, not just new FDI ones. The policy therefore carries with it a cost in the form of lost tax from firms already located in Northern Ireland, both foreign owned and domestic. These losses have to be estimated before the overall tax picture can be known.

5.25 The calculations for tax losses from existing foreign and domestic firms are done separately using the same approach as described for Stage 2 above. This method can be summarised in a flow chart which for convenience is described as the 'jobs-to-tax calculation'. This is shown in Figure 5.2 below.

Figure 5.2: 'Jobs to Tax Calculation'



5.26 To estimate employees and GVA in foreign owned firms RFL's estimates of GVA and employees have been split, based on the proportion of each sector's employment/GVA that is foreign owned. The proportion of each sector in foreign ownership data was provided by Holger Görg of the University of Nottingham based on data provided for this project by DETI. The original data from DETI suggested a lower level of employment in foreign owned firms than is suggested by other sources, notably Invest NI (see Box 1 below). However, DETI have reviewed their statistics for this research and have provided new proportions of each sector in foreign ownership. As the box shows, a discrepancy remains between DETI's figures and Invest NI's. RFL have used DETI's figures in this report but feel that it is important that an attempt should be made to arrive at consistent estimates for foreign employees and GVA. The same caveats as applied to the tax calculations at Stage 2 above also apply in this section.

Box 1: Invest NI Data on Employment in Foreign Owned Companies

The following statistic is provided under the 'locate in Northern Ireland' banner of Invest NI's website:

> '687 externally-owned companies employing 70,477 people have already set up operations throughout Northern Ireland. Key investors include leading multi-national companies such as Seagate Technology, DuPont, Bombardier Aerospace, Caterpillar, Allstate, Liberty Mutual, ASG, Nortel Networks, Daewoo Electronics, Abbey, BT and Halifax.'

Source: http://www.investni.com/index/locate.htm#topofpage 23rd October 2006

The figure quoted is 10,000 higher than the estimates of employees in foreign owned firms generated by applying DETI's sectoral breakdown of employees in foreign owned companies to sectoral employee numbers (60,600 in 2003).

5.27 The estimated Corporation tax revenues from foreign owned and domestic firms in Northern Ireland in 2007 (the first year assumed for the new tax regime) are shown in Table 5.7 below. Table 5.8 then shows the estimated tax losses from these firms as a result of a reduction in Corporation tax. The short term tax loss amounts to about £320 million per annum, rising slowly over time as employment levels increase.

Table 5.7: Corporation Tax Revenue Estimates from Foreign and Domestic Firms in NI, 2007 (£m)

	Estimated Current Corporation Tax Revenues, 2007	
	Domestic	**Foreign-Owned**
Agriculture	19	0
Extraction	2	0
Manufacturing – Food, Drink &Tobacco	31	24
Manufacturing – Textiles &Leather	0	0
Manufacturing – Wood & Wood Products	3	0
Manufacturing – Pulp, Paper & Printing	4	5
Manufacturing – Coke, Oil & Nuclear	0	0
Manufacturing –Chemicals	1	12
Manufacturing – Rubber & Plastic Products	2	7
Manufacturing – Other Non-Metallic Mineral Products	5	2
Manufacturing – Basic Metals	5	2
Manufacturing – Machinery & Equipment	1	7
Manufacturing – Electrical & Optical Equipment	1	8
Manufacturing – Transport Equipment	3	0
Manufacturing nec	4	0
Electricity, Gas & Water	25	4
Construction	53	2
Distribution	99	11
Hotels & Restaurants	23	1
Transport & Communications	33	4
Financial Services	59	8
Business Services	61	9
Public Admin & Defence	35	0
Education	7	0
Health	20	5
Other Personal Services	37	0
Total **Manufacturing**	**533** **60**	**106** **63**

Source: RFL

Table 5.8: Reduced Corporation Tax Revenue Estimates from Existing Foreign and Domestic Firms (£m)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016-2030 (Average £m pa)
Reduced Corporation Tax from Existing Domestic Firms	-266	-274	-282	-291	-300	-308	-315	-323	-332	-405
Reduced Corporation Tax from Existing Foreign Firms	-53	-55	-56	-58	-60	-62	-64	-66	-68	-86
Total	-319	-329	-338	-349	-360	-370	-379	-389	-399	-490

Stage 4: Additional Tax from Induced Investment by Locally Owned Firms

5.28 The additional profits that locally owned firms realise through the tax reduction will be used for a number of purposes including re-investment and personal consumption by the owners in the local economy. In their modelling RFL have assumed that one third of additional profits are used to re-invest in the business one third is spent by the business owners in the local economy and one third is lost to the economy (for example, saved), or spent abroad.

5.29 Re-investment by foreign owned firms is assumed to be covered in the FDI flows (which, as a result of the nature of the data, include expansions of existing foreign owned firms). A similar 'flow-in' rate is applied as for FDI flows (Table 5.1) as it will take time for firms to assess the situation and put in place developments and thus deliver extra employment output and taxes. To estimate additional employment from increased investment (funded by the profits windfall) a capital stock per employee has been approximated for each sector. This is set at £200,000 for each sector save for utilities which is set at £500,000. Using the capital stock per employee the re-invested profits can be translated into additional employees. Using the standard jobs – tax returns methodology outlined in previous sections, this is translated into extra tax revenues.

5.30 In addition to the extra profits that are re-invested, an estimate is made of additional jobs created in distribution, hotels and other services (primarily relating to leisure and cultural activities in this instance) as a result of the increased spending in the economy. This is done via the ratio of consumer expenditure to jobs in each sector taken from NI_PS. (The overall multiplier is halved to reflect some ability for existing employment to cope with some extra consumer expenditure and the likelihood of spending on imports).

5.31 Productivity in the induced jobs is assumed to be the same as the sectoral average. Although the model's capabilities allow for a change to this assumption, there is no evidence to suggest that the induced investment will generate greater efficiency. This may understate the effects, as in many cases the money may be re-invested but in equipment rather than labour which could boost productivity. Consideration should be given to adapting the model to allow this form of adjustment and evidence sought as to the likely split between productivity improvements and employment from induced spending.

5.32 The important use of assumptions about the sectoral composition of capital stocks and the distribution of windfall gains across activities should be noted. If better evidence comes to hand these can be modified. It should also be noted that the current methodology assumes there is no transfer pricing so there are no extra profits declared in domestic firms by switching production or profits from their mainland operations. In reality, this is likely to be relatively minor – the more acute effect of this behaviour might well be in the FDI and foreign owned sector.

5.33 The estimates of additional induced employment and Corporation tax in the indigenous sector are shown in Tables 5.9 and 5.10 below. Overall around 1000 new jobs are generated in this sector as a result of reinvesting the windfall from reduced Corporation tax, rising to about 1500 by 2030. In terms of additional Corporation tax this rises to about £2.8 million per annum over the same period.

Table 5.9: Induced Employment in Locally Owned Firms (000s)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016-2030 (Average Jobs pa)
Induced Employment (Cumulative)	0.25	0.75	1.54	2.61	3.72	4.86	6.03	7.22	8.45	1.50
Induced Employment (Per annum)	0.25	0.51	0.78	1.08	1.11	1.14	1.16	1.20	1.23	1.50

Table 5.10: Corporation Tax in Locally Owned Firms

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016-2030 (Average £m pa)
Induced Corporation Tax (Cumulative)	0.22	0.69	1.43	2.50	3.64	4.87	6.18	7.60	9.12	2.76
Induced Corporation Tax (Per annum)	0.22	0.47	0.75	1.06	1.14	1.23	1.32	1.41	1.52	2.76

Stage 5: Additional Tax from 'Knock-On' Secondary Jobs

5.34 The additional employment arising from additional new inward investment jobs, both Greenfield and expansion calculated in Stage 1 and the additional induced employment from windfall profits set out above together create further second round or 'knock on' employment processes in the local economy. These are jobs in areas such as construction or retailing that rise to meet increased demand. The multipliers across sectors differ for these effects and are summarised in Table 5.11 below.

5.35 The result of the increased employee jobs (from all three sources – direct, induced and secondary) is to push up employment rates. This in turn attracts in more migrants to fill the vacancies. There will be some extra jobs filled from people currently living in Northern Ireland but initially outside the labour market, that is, those who are currently economically inactive. However, as recent evidence shows, much of the labour supply will come from migrants who apply much less upward pressure on wages and are therefore very attractive to employers. As the employment rate gets higher the number of migrants rises more sharply. The rate of migration is based on the NI_PS model outputs and is set out in Table 5.12.

Table 5.11: 'Knock on' Multipliers – Jobs Created from an Additional 100 'Knock on Factor'

	'Knock on' Tied To …	'Knock on' Jobs (per 100)
Electricity, Gas & Water	Jobs	0.1
Construction	Jobs	6.0
Distribution	People	6.7
Hotels & Restaurants	People	6.4
Transport & Communications	Jobs	2.8
Financial Services	Jobs	3.8
Business Services	Jobs	3.6
Public Admin & Defence	Jobs	3.3
Education	People	3.9
Health	People	6.6
Other Personal Services	Jobs	2.1

Table 5.12: Induced Migration from Additional Jobs

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016-2030 (Average People pa)
Additional Migration (Cumulative)	0.03	0.14	0.39	0.83	1.20	1.51	1.69	1.97	2.36	0.84
Additional Migration (Annual)	0.03	0.12	0.25	0.44	0.37	0.31	0.18	0.28	0.39	0.84

5.36 As the ripples from the initial new employment spread through the economy the effects become more complex. The extra migrants (of working age) may have children and will eventually age beyond the working age category over the course of the forecast. This is factored into the model as additional claims on future public expenditure. The additional population induces a further round of job creation in retailing, hotels and public services. 'Knock-on' jobs themselves can create further jobs and this is factored in through a lagged effect. Extra tax revenue is estimated using the same method of jobs to profits calculations. The productivity of the knock-on jobs is assumed to be the same as the sector average. Self employment also rises in response to the growing labour market and this is projected using self employment to employee ratios in the sectors with 'knock-on' jobs

5.37 Such an inter-laced scenario can obviously be difficult to predict. For example, the role of migrants is hard to assess. It is likely there will be a steady stream of in-migrants (if not, wage increases would potentially choke off investment) to fill additional jobs but it is difficult to be precise on the scale of in-migration. It is also difficult to accurately estimate the knock on multipliers as these can change over time. Those used were originally used in scenario work RFL conducted for the Economic Development Forum using the NI_PS model and are therefore econometrically derived. Finally, there is an inherent assumption that additional public expenditure (see below) is available to fund extra jobs in public services.

5.38 Estimates of these 'knock on' effects are given in Tables 5.13 and 5.14 below. Around 3,000 jobs per annum are eventually produced through 'knock-on' effects. In the short run job growth is much more modest at under 1,000 each year prior to 2011 reflecting the 'gearing-up' of FDI and induced domestic investment. In tax terms, additional returns rise to £2.8 million per annum in the long run and are, similar to new employment, modest in the short term.

Table 5.13: Additional Jobs from 'Knock-on' Effects

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016-2030 (Average Jobs pa)
Knock-on Employment (Cumulative)	0.10	0.38	0.90	1.74	2.83	4.11	5.49	6.93	8.47	3.04
Knock-on Employment (per annum)	0.10	0.28	0.52	0.84	1.09	1.28	1.38	1.44	1.54	3.04

Note: Including self-employment.

Table 5.14: Additional Tax from 'Knock-on' Effects

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016-2030 (Average £m pa)
Knock-on Corporation Tax (Cumulative)	0.10	0.36	0.86	1.64	2.63	3.77	5.01	6.34	7.77	2.76
Knock-on Corporation Tax (per annum)	0.10	0.26	0.50	0.78	0.99	1.14	1.24	1.33	1.43	2.76

Note: No additional self-employment returns in Corporation tax.

Stage 6: Benefits Savings

5.39 The extra people attracted into the labour market (other than through migration) to fill the extra jobs created by FDI flows, induced effects and secondary effects reduces the number of people receiving benefits from the tax payer, thus reducing exchequer outlays. To estimate these effects the number of people leaving unemployment and inactivity is projected by apportioning those jobs not taken by migrants. One quarter of these jobs are assumed to be filled by the unemployed. The saving to the exchequer is calculated on the basis of the following average costs from the Department of Social Development's summary of social security statistics 2005;

- Unemployment £60 per week or £3120 per annum
- Incapacity £84 per week or £4368 per annum

5.40 No reduction in PE costs or employment is estimated in relation to the reduction of the level of benefits paid (e.g. job loss or administrative costs in benefit offices). Also it is difficult to estimate inactivity savings as this includes a range of labour market activities including looking after the home and students who may not receive any benefits. In addition tax credits to the low paid may negate some of the savings from reduced benefit payments.

5.41 The outcome of the calculations on reduced benefit payments is shown in Table 5.15. The savings are more significant from reduced inactivity, averaging over £10 million per annum in the long run (it peaks at over £16 million in the medium term). In the long run these savings fall as more labour is sourced through migration flows. Unemployment savings run at a more modest £2.6 million in the long run.

Table 5.15: Reduced Benefits Payments

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016-2030 (Average £m pa)
Saving from Reduced Unemployment (Cumulative)	0.49	1.75	3.94	7.03	10.58	14.39	18.24	22.09	25.93	2.56
Saving from Reduced Inactivity (Cumulative)	2.08	7.37	16.53	29.51	44.44	60.45	76.62	92.76	108.89	10.76
Saving from Reduced Unemployment (per annum)	0.49	1.26	2.18	3.09	3.56	3.81	3.85	3.84	3.84	2.56
Saving from Reduced Inactivity (per annum)	2.08	5.29	9.16	12.98	14.93	16.01	16.17	16.14	16.12	10.76

Stage 7: Additional Tax from Other Income and Production Taxes

5.42 There are a range of other taxes paid by people in employment and by firms and individuals which will also provide extra revenue to the exchequer. In this model these are categorised using the Regional Accounts categorisations, namely:

- Current taxes on income
- Social Contributions
- VAT
- Other taxes (including excise duty, stamp duty, etc)

5.43 Each of these is estimated in a mechanistic way to give a first approximation of the likely returns from each. They are projected as follows:

- Income tax – on the basis of a ratio of wages paid to income tax receipts from the UK (factored down by 10% to reflect greater level of low income earners in NI).
- Other taxes – on the basis of a ratio to population from the UK and then factored down by 20%. This factor is due to the fact that at present local authority rates and stamp duty returns are lower in Northern Ireland.
- Social contributions – estimated on the same basis as income tax.
- VAT – is estimated by assuming a rate of 17.5% is applied to induced & 'knock-on' GVA. In other words no VAT is assumed to be paid on the additional output from FDI flows (which is assumed to be wholly exported from the UK and to incur no VAT).

The shares are held constant and applied to the NI projection of the relevant element (wages, employment or population) that results from the tax change (and discussed in elements 1 to 6 above). This procedure assumes that on average the NI relationships between the various taxes and the variable to which they are 'pinned' (wages, population, or non FDI GVA) parallel those in the UK. No data was available on NI tax receipts to measure this. In addition, there is always a danger that the ratios may change over time, especially when projecting so far ahead.

5.44 The calculated additional tax revenue available using these procedures is shown in Table 5.16 below. The additional tax projected is significant rising to over £131 million per annum in the long run. Income tax is the largest element accounting for over two fifths of the total.

Table 5.16: Additional Tax Revenues

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016-2030 (Average £m pa)
Income Tax (Cumulative)	2.3	8.7	20.8	39.4	62.2	88.2	115.7	144.9	175.9	56.7
Other Taxes – including Rates / Stamp / Excise (Cumulative)	0.0	0.2	0.8	2.1	4.0	6.4	9.1	12.2	15.9	12.1
Social Contributions (Cumulative)	1.4	5.4	12.9	24.4	38.5	54.6	71.6	89.6	108.8	35.1
VAT (Cumulative)	0.7	2.7	6.6	12.7	20.6	29.9	40.1	51.2	63.4	27.3
Total (Cumulative)	**4.6**	**17.1**	**41.1**	**78.6**	**125.4**	**179.1**	**236.6**	**297.9**	**364.0**	**131.2**
Income Tax (Annual)	2.3	6.4	12.1	18.6	22.9	26.0	27.5	29.1	31.1	56.7
Other Taxes – including Rates / Stamp / Excise (Cumulative)	0.0	0.2	0.6	1.3	1.9	2.4	2.7	3.1	3.7	12.1
Social Contributions (Annual)	1.4	4.0	7.5	11.5	14.1	16.1	17.0	18.0	19.2	35.1
VAT (Annual)	0.7	2.0	3.8	6.1	7.9	9.3	10.3	11.1	12.1	27.3
Total (Per annum)	**4.6**	**12.5**	**24.1**	**37.4**	**46.8**	**53.8**	**57.4**	**61.3**	**66.1**	**131.2**

Stage 8: Additional Public Expenditure Costs

5.45 The final stage in the analysis involves calculating any additional public expenditure cost pressures as a result of the processes set in train by lowering Corporation tax. Clearly, the additional employment in public services induced by the increased population (as set out in Stage 5 above) will require additional public expenditure to pay the wages of new public sector workers and provide the increased services. A ratio of Public Expenditure (Departmental Expenditure Limits and the Northern Ireland Office) to public services employees (SIC sectors public administration, health and education) is estimated from the NI_PS model (which also provides Departmental Expenditure Limit forecasts). This is then applied to the extra jobs to arrive at an estimate of additional exchequer costs[30]. There are two caveats to this conclusion. First, There may be efficiency gains within the public services and the extra services may not need similar ratios of employees in the future as currently projected. Second, the private sector might provide a greater proportion of the services estimated to be publicly funded in this projection.

5.46 The calculations for required additional public expenditure are shown in Table 5.17 below. In total the pressure on the Departmental Expenditure Limit (DEL) rises to about £54 million per year in the long run. This is broadly equivalent to the additional income tax receipts generated.

Table 5.17: Additional Public Services Employment and Expenditure

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016-2030 (Average pa)
Additional Public Services Employees (000s) (Cumulative)	0.00	0.00	0.02	0.07	0.19	0.35	0.56	0.80	1.07	0.95
Additional DEL Required (£m) (Cumulative)	0.00	0.20	1.13	4.23	10.87	20.54	32.70	46.26	62.05	54.38
Additional Public Services Employees (000s) (per annum)	0.00	0.00	0.02	0.05	0.11	0.17	0.21	0.23	0.27	0.95
Additional DEL Required (£m) (per annum)	0.00	0.20	0.93	3.10	6.64	9.67	12.16	13.57	15.78	54.38

Summary

5.47 All of the elements needed to obtain an overall view of the tax implications of a step change in the Corporation tax have now been estimated. Table 5.18 pulls all of the separate elements together to provide an overall assessment.

[30] Although SIC sectors L, M and N include a non-public sector element, the method is not affected by this as it takes the DEL level per employee in these sectors.

Table 5.18: Summary of Tax Implications

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2030
Net Additional Corporation Tax (see below)	-316.6	-318.5	-313.3	-301.4	-283.5	-261.5	-236.3	-211.6	-185.4	531.1
Income Tax	2.3	8.7	20.8	39.4	62.2	88.2	115.7	144.9	175.9	1,026.6
Other Taxes – including Rates / Stamp / Excise	0.0	0.2	0.8	2.1	40	6.4	9.1	12.2	15.9	198.0
Social Contributions	1.4	5.4	12.9	24.4	38.5	54.6	71.6	89.6	108.8	635.0
VAT	0.7	2.7	6.6	12.7	20.6	29.9	40.1	51.2	63.4	472.1
Benefit Savings	2.6	9.1	20.5	36.5	55.0	74.8	94.9	114.8	134.8	334.7
Additional Public Sector Costs (note a cost)	0.0	0.2	1.1	4.2	10.9	20.5	32.7	46.3	62.0	877.8
Total	**-309.5**	**-292.5**	**-252.9**	**-190.6**	**-114.0**	**-28.1**	**62.4**	**154.9**	**251.4**	**2,319.7**

5.48 As the table suggests, by 2013 the overall effect on the public finances is positive. This is, of course, dependent upon the model assumptions and in particular realising the FDI flows. Income tax, followed by benefits savings and Social Contributions provide the most significant in-flows to the exchequer. The table also reveals how the net Corporation tax effect remains negative until beyond 2015 (2021 in fact). This reflects the losses to the exchequer from existing firms paying less tax which is slowly eroded by the additional Corporation tax from new firms attracted into the economy (either directly or indirectly).

5.49 Table 5.19 looks in more detail at the elements making up the costs of the direct impact of changing Corporation tax. This table reveals that existing domestic firms are the most significant component of 'lost' Corporation tax. In the long-run additional tax from new FDI firms outweighs this loss but it is important to bear in mind that this does not occur for over 10 years.

Table 5.19: Impact on Corporation Tax Revenues

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2030
Additional Tax from New FDI	2.3	9.2	22.8	43.9	70.2	100.1	131.0	163.2	197.0	1,000.8
Additional Tax from Knock-on Effects	0.1	0.4	0.9	1.6	2.6	3.8	5.0	6.3	7.8	49.2
Additional Tax from Induced Domestic Firms	0.2	0.7	1.4	2.5	3.6	4.9	6.2	7.6	9.1	50.6
Reduced Tax from Existing Foreign Firms	-52.9	-54.8	-56.4	-58.2	-60.3	-61.9	-63.7	-65.6	-67.6	-102.5
Reduced Tax from Existing Domestic Firms	-266.3	-273.9	-282.0	-291.3	-299.7	-308.4	-314.8	-323.1	-331.6	-467.0
Total	**-316.6**	**-318.5**	**-313.3**	**-301.4**	**-283.5**	**-261.5**	**-236.3**	**-211.6**	**-185.4**	**531.1**

5.50 The main tax results of the model are shown graphically in Figures 5.3 and 5.4 below. Figure 5.3 shows the annual tax position, revealing 'break-even' in 2013 on total tax revenues and 2021 on Corporation tax alone. Figure 5.4 shows the cumulative total tax position which shows break-even occurs by 2017.

Figure 5.3: Net Corporation Tax and Total Tax Revenues, 2007-2030

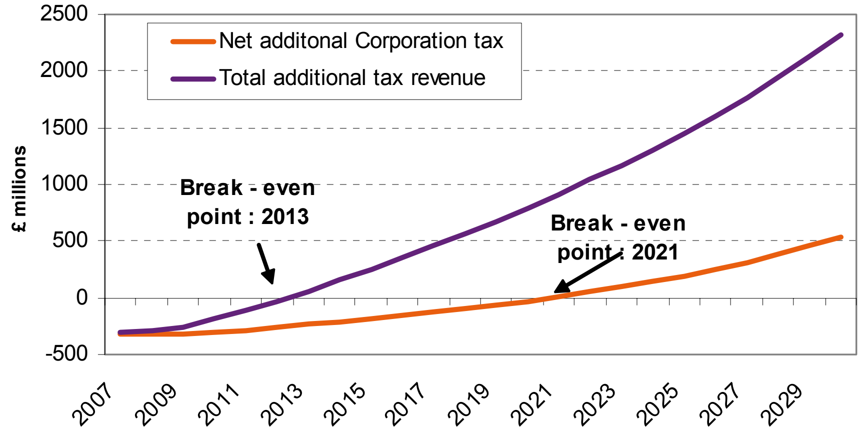
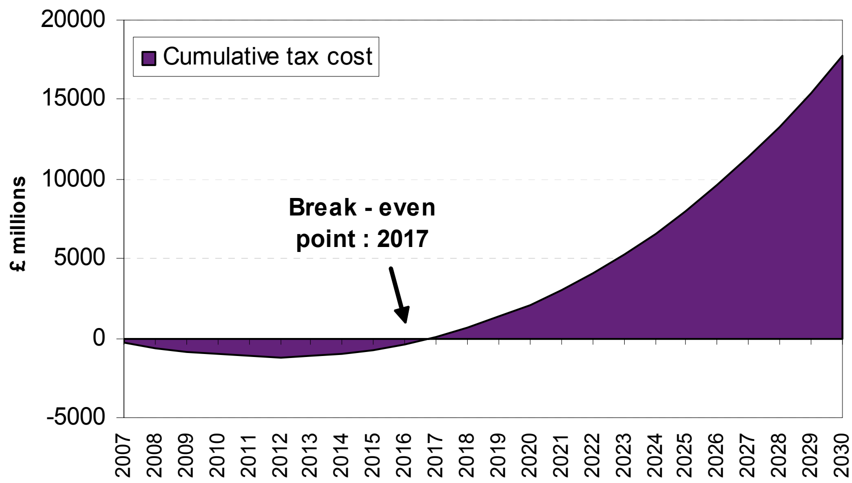


Figure 5.4: Cumulative Tax



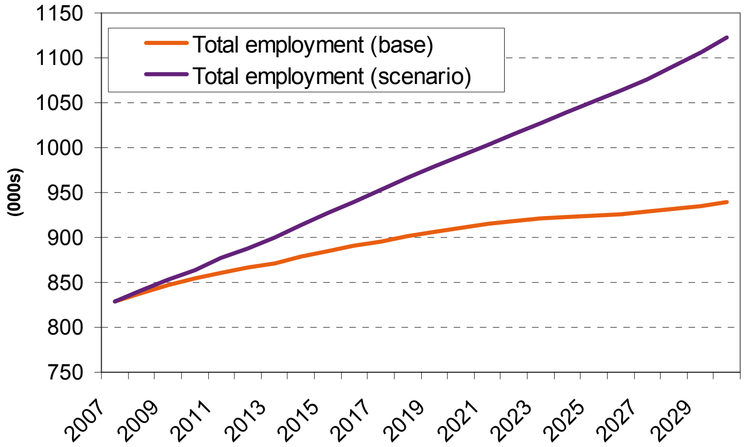
Impact on Other Economic Indicators

5.51 The calculation of exchequer cost is of course an important purpose of constructing the tax model but of more significance is the impact that a policy of reducing Corporation tax may have on the performance of the economy. It must always be remembered that this is merely an instrument for moving the economy onto the higher growth trajectory it needs to attain to improve living standards and reduce the region's dependence on subventions from the central government. The model also allows these effects to be calculated for the key economic indicators.

Employment

5.52 Figure 5.5 below summarises the impact of the new policy on employment growth. The base case is forecast from the NI_PS model assuming no change in existing tax policies in Northern Ireland. In this case long run growth in employment steadies as public expenditure growth slows and expansion of employment in the retail sector draws to a close. This is clearly what can be expected if the public sector is relied upon as the engine of growth for the economy at a time when public expenditure growth has plateaued. In contrast the cut in Corporation tax shifts the focus on growth to new FDI and employment in this case climbs steadily in the longer term at about 5000 jobs per annum over the base case as FDI flows and knock on effects take hold.

Figure 5.5: Total Employment in Base Forecasts and Tax Cut Scenario



Population

5.53 As Figure 5.6 indicates population rises in both the base case and the Corporation tax cutting scenario, largely through the recent phenomenon of net-migration which is forecast to continue. In the Corporation tax cutting scenario the extra jobs and prosperity attract additional migrants which drives up population further. This is shown in more detail in Figure 5.7 below, which shows the total migration flows under the base model and the Corporation tax cutting scenario.

Figure 5.6: Population in the Base and Tax Cutting Scenario Forecasts

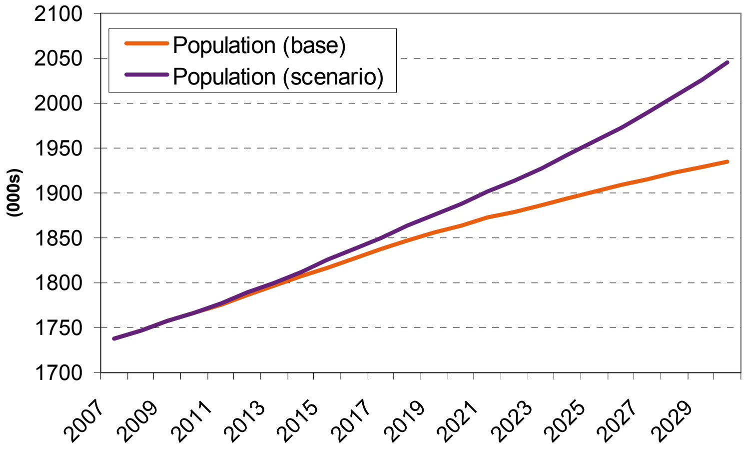
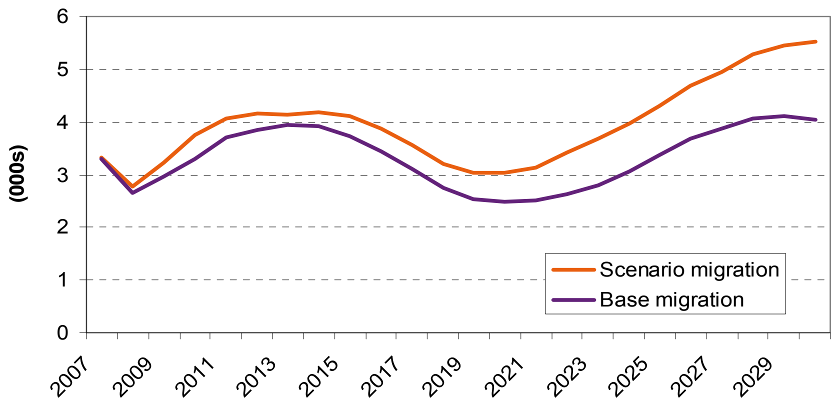


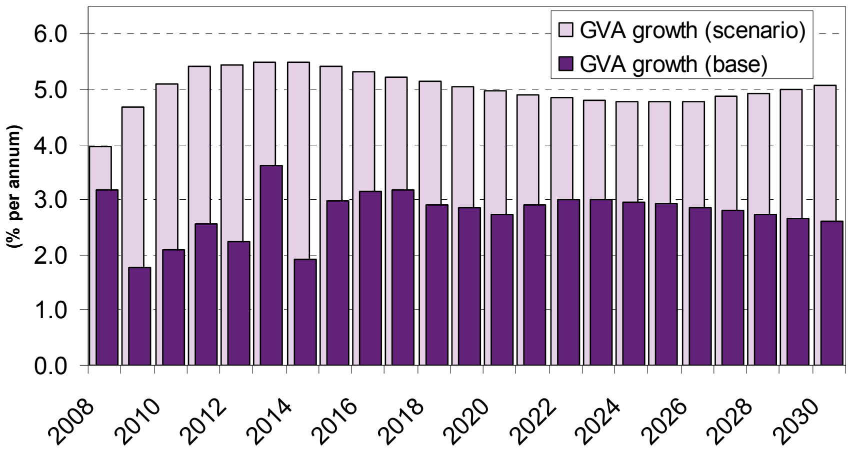
Figure 5.7: Net Annual Migration in the Base and Scenario Forecasts



Gross Value Added

5.54 The accepted measure of output in the economy is now Gross Value Added or GVA. The growth of this aggregate is therefore of considerable interest. Figure 5.8 below compares the growth of GVA in the base case and in the Corporation tax cutting scenario. The growth rate of around 5% per annum in the Corporation tax cutting scenario is much higher than would otherwise be the case. In fact this scenario projects a doubling of the economy's growth rate. In simple terms this implies that the economy would double in size within fourteen years compared to approximately thirty years at the present rate of progress. This is impressive but below levels experienced in the past in RoI and is thus within the bounds of the conservative approach taken in this analysis. Part of the reason for the discrepancy may be because the RoI has had more scope in the past to raise its employment rates. It is important to remember that GVA growth becomes a less meaningful measure of economic growth as the proportion of profits accruing to foreign owned firms increases. This is because foreign owned firms can repatriate or 'export' some of their profits. In this situation GNP becomes a better measure for GDP or GVA, but this measure is not supported statistically at the regional level.

Figure 5.8: GVA Growth Per Annum in Base and Scenario Model



5.55 The potential to double the growth rate in Northern Ireland is of immense importance. If the region was growing at twice the rate of the UK then, other things being equal, the present productivity gap of 20 per cent could be eliminated in just under a decade. This would be a 'win win' outcome for the people in Northern Ireland and for the UK as a whole. Even the Treasury would gain from a significant reduction in the support it currently needs to give to the region.

Assumptions and Sensitivity

5.56 In all complex modelling exercises it is important to check that the assumptions behind the estimates are reasonable. Making assumptions about critical parameters is unavoidable since not every factor can be known with certainty, but the general rule is to estimate on the basis of conservative assumptions, particularly for important variables. Certain assumptions are a priori very important in the structure of the tax model, so it is prudent to consider carefully if the results that have been obtained are particularly sensitive to the values or implications that have been used in relation to those variables. The following summarises the downside/upside risk for the main assumptions in the current analysis.

5.57 **Downside risk (for UK, upside for NI) – transfer production/pricing**: It is assumed that transfer pricing will only be possible in new investment made by foreign owned firms. Locally owned firms and existing investment in foreign owned firms are assumed to be unable to introduce significant levels of transfer pricing. This is hugely important – if UK firms can transfer declared profits and/or production to NI there is a considerable tax (and possibly general economic) gain to NI but a loss to the UK exchequer. This could be significant – if one percent of UK profits moved from Great Britain to NI and tax revenue was halved, it would cost the exchequer £200million alone. Similarly, if the new NI FDI flows used in the model actually include the transfer of production from Great Britain, then the benefits are overstated as they assume all FDI is new and would not have happened without the tax change. Overall the assumption of no profit shifting or transfer pricing from the UK greatly strengthens the case made by the modelling of a cut in Corporation tax in Northern Ireland.

5.58 **Downside risk – FDI flows**: FDI flows, the primary source of increased revenues, are not estimated in detail and it is possible that Northern Ireland may not easily achieve its proportionate share of new foreign investment, even with a lower Corporation tax rate. There is also a discrepancy with the general finding in the academic literature that the elasticity of FDI flow with respect to Corporation tax is around 0.6. This implies that a cut of 50 per cent in the present rate of Corporation tax would increase FDI flows by around 30 per cent, which is much less than estimated using the methodology in this report. However, as argued previously, the use of a reduced Corporation tax is considered to be a major strategic decision that can galvanise and re-charge the whole industrial development effort in Northern Ireland. In that context the scale of the increases in FDI flows which are estimated are by no means beyond reach. As for the issue with the academic literature, that is a matter that requires further investigation. There are wide variations in the estimates of tax/FDI elasticities reported for various studies and over differing time periods. As a check on the feasibility of the estimates in this study the model was re-run with a range of estimates of what Northern Ireland might achieve by way of increased FDI flows following a reduction in Corporation tax. Reducing the proportion of new FDI captured clearly extends the period before the tax equation balances and the full economic benefits are achieved but the relationship is not proportionate. Table 5.20 below reports the situation for a full range of assumptions about FDI capture going from the worst case scenario where no additional FDI emerges to full proportionality with the RoI.

Table 5.20: Proportion of NI's Pro Rata Share of FDI Flows Realised Each Year

	2007	2008	2009	2010 onwards	Average Jobs Promoted pa (2007-2030)	Breakeven Point
Base case	0.25	0.50	0.75	1.00	Circa 5,500	2013
Sensitivity 1	0.25	0.50	0.75	0.75	Circa 4,400	2013
Sensitivity 2	0.25	0.50	0.50	0.50	Circa 3,000	2015
Sensitivity 3	0.25	0.25	0.25	0.25	Circa 1,500	2019
Sensitivity 4	**0**	**0**	**0**	**0**	**0**	**Circa 2031**

5.59 It is also very important to stress that in this context the circumstances in which a reduction in Corporation tax in Northern Ireland would take place are quite unique. This policy change would be occurring in part of a small island whose other part has clearly proved to be one of the most attractive locations in the world for FDI. Aligning Corporation tax rates north and south would go a long way to making the entire island an investment zone. Benefits of scale would flow to both economies and there seems no reason why companies who have already invested in the south should not in future regard Northern Ireland as a favourable location to re-invest part of their earnings. These synergies are difficult to model formally but they point to benefits that would not be available if the two jurisdictions remained, in tax terms, separate locations, to the disadvantage of Northern Ireland.

6. CONCLUSIONS

6.1 Corporate tax rates have been falling across Europe for some time as governments seek to capture a share of internationally mobile investment and stimulate greater activity from domestic firms. For large countries with a well developed economic infrastructure the benefits of attracting new investment have to be weighed carefully against the erosion of the tax base that may result from a cut in Corporation tax. For small countries and regions with a less well developed economy this is less of a concern and bolder reductions in Corporation tax are more feasible. The example par excellence of using a low corporate tax regime to stimulate economic growth is, of course, the Republic of Ireland which has moved from being among the poorest States in the original European Community to being among the richest in the greatly expanded European Union in less than a generation. This has made the Irish experience one of the most intensively studied phenomena in recent times and although many factors have been identified as contributing to the emergence of the 'Celtic Tiger' the common thread that runs through all studies is the importance of the low rates of Corporation tax in the RoI as a catalyst for development.

6.2 The motivation for this study was to see what the effect would be on the economic performance of Northern Ireland if a Corporation tax regime similar to that in the RoI, the other economy on the Island, was introduced in the region. This was prompted by growing concerns that the economy in Northern Ireland was fundamentally weak, with far too great a reliance on public expenditure (and hence transfers from the central exchequer) to be a sustainable position in the longer term. What the economy requires is to move to a new and higher growth trajectory that can be sustained. Unfortunately the available evidence suggests that the traditional policy instruments that have been relied upon for decades within the overall UK fiscal regime are simply incapable of delivering this result. Hence, the search for new policy instruments and the willingness to learn from the RoI who have successfully made such a transition between growth trajectories.

6.3 This is the first study to examine comprehensively the potential impact of a lowering of Corporation tax in Northern Ireland. It goes beyond the analysis that has hitherto been done of this issue and constructs a formal model of the interaction of the tax regime with the wider economy. The conclusions of this exercise are:

- Based on the assumptions built into the model, halving Corporation tax would set in train changes in the economy through new investment and increased activity that would reach the 'break even' point in tax terms in 2013, after incurring an initial cost of £310m in the first year. Beyond 2013 there would be a net gain to both NI and the UK public finances

- Around 184,000 additional jobs are projected under this scenario by 2030 compared to the base forecasts which assume no change in existing policies, producing an extra £30.1bn of additional GVA by 2030

- GVA growth would average 5% per annum over the forecasts. This represents a doubling of the present growth rate and would significantly reduce the prosperity and productivity gap with the UK. The latter could be eliminated in a decade.

- The assessment of potential FDI flows is based on recent flows into the RoI. For this potential to be realised will require a complete overhaul of our existing economic development mechanisms and institutions, and a dedicated focus on opening Northern Ireland to the World economy.

- The risk to the UK mainland economy of transfer pricing and movement of production could be important but it is not a condition required for the results of this study.

- The projections assume that Northern Ireland is able to retain existing support measures for industry. If this is not possible the path to a new higher growth trajectory may be longer than the modelling exercise projects.

- The report has not been concerned with the mechanics of implementing a policy of reducing Corporation tax in a specific region of the UK. There are serious difficulties, including the issue of EU State aids in such a policy but other work outside this study suggests that these are not insurmountable.

6.4 The analysis in this report shows that a reduced rate of Corporation tax could yield real and lasting benefits for the Northern Ireland economy. But it is important to understand that these benefits would not flow automatically without the need to address the entire range of existing support mechanisms and institutional infrastructure. In that sense a cut in Corporation tax should be seen as a catalyst for refocusing all of the energies of the region on meeting the challenge of engaging through trade and other means with the World. Without such an engagement the region will never reach its full potential

ANNEX

DEVELOPING THE BUSINESS CASE FOR ALIGNING CORPORATE TAXATION IN BOTH PARTS OF THE ISLAND

<u>**Proposed Terms of Reference**</u>

Generally, to examine the economic gain to Northern Ireland from the introduction of the same corporate tax arrangements in Northern Ireland as in the Republic and, in particular, to assess the extent to which it would enable GVA per head in Northern Ireland to converge with the UK average.

The project should include:

(1) An examination of the contribution of low corporate tax rates to the stimulation of high levels of economic performance in the Republic and elsewhere through the encouragement of export-driven growth.

(2) An identification of those elements of the corporate tax regime (in addition to the low headline rate) which have made the republic highly attractive to FDI.

(3) An examination of how corporate taxes influence the location decisions of different types of FDI (eg pharmaceuticals, electronics, services etc), of the market trends for those types, and of the potential size of the market in the future for the types shown to be most influenced by corporate tax issues.

(4) An examination of how much of this market might be attracted by a lower Corporation tax regime in Northern Ireland, taking into account that the province forms part of an island whose southern half is already successful host to a relatively large amount of FDI.

(5) Consideration of the extent to which removal of the differential in Corporation tax would extend the cluster effect in the RoI to the whole island.

(6) A simulation of the overall impact on the Northern Ireland economy of the influx of net additional FDI derived from the analyses at (3) and (4) and of the response of the existing business base to the lower Corporation tax regime.

(7) An estimation of the likely effect of this overall impact on the tax yield and on the annual Treasury subvention in the short and long term.

REFERENCES

Altshuler, R., Grubert, H. and Newlon, T. S. (2001). Has US investment abroad become more sensitive to tax rates?, in Hines, J.R. Jr. (ed.), *International taxation and multinational activity*, University of Chicago Press, Chicago, USA.

Baldwin, R. and P. Krugman (2004) Agglomeration, integration and tax harmonisation, *European Economic Review*, 48, 1 – 23.

Barrios, S., H. Görg and E. Strobl (2006) "Multinationals' location choice, agglomeration economies and public incentives", *International Regional Science Review*, 29, 81-107

Barry, F. and Bradley, J. (1997). "FDI and trade: The Irish host-country experience". *Economic Journal*, 107, 1798-1811.

Barry, F. and D. Curran (2004) "Enlargement and the European Geography of the Information Technology Sector", *World Economy*, 27, 6, 901-922

Barry, F., Görg, H. and Strobl, E. (2003). "Foreign direct investment, agglomerations and demonstration effects: an empirical investigation". *Weltwirtschaftliches Archiv*, 139, 583-600.

Barry, F., L. Thebault and D. Wojcik (2006) "The Geography of Offshore Financial Services in Europe and the Emergence of Ireland's IFSC", unpubl. ms., University College Dublin.

Barry, F. and C. O'Mahony (2004) "Making Sense of the Data on Ireland's Inward FDI", *Journal of the Statistical and Social Inquiry Society of Ireland*, forthcoming.

Braunerhjelm, P. and B. Borgman (2004) "Geographical Concentration, Entrepreneurship, and Regional Growth: Evidence from regional data in Sweden 1975–1999", Regional Studies

Burnham, J. (1998). "Global telecommunications: a revolutionary challenge". *Business and the Contemporary World*, (2), 231-248.

Cato Institute (2002) Tax and Budget Bulletin No. 3, April.

CM Insight (2004) *The UK Contact Centre Industry: A Study*, report to the UK Department of Trade and Industry.

Crone, M. (2002) *A Profile of the Irish Software Industry*, Belfast: Northern Ireland Economic Research Centre, www.qub.ac.uk/nierc

Datamonitor (2002) Call Centres in EMEA to 2007. http://www.datamonitor.com/

Davies, S. and B. Lyons (1996). *Industrial organisation in the EU*, Clarendon Press, Oxford, UK.

Desai, M., C.F. Foley and J.R. Hines Jr. (2002) "Chains of ownership, regional tax competition, and foreign direct investment", NBER Working Paper 9224.

Desai, M., C.F. Foley and J.R. Hines Jr. (2006) "The demand for tax haven operations", *Journal of Public Economics* 90, 513– 531.

Devereux, M. and Griffith, R. (2002), Evaluating Tax Policy for Location Decisions, CEPR Discussion Paper 3247.

Devereux, M., R. Griffith and A. Klemm (2002), Corporate income tax reforms and international tax competition, *Economic Policy*, 17, 451-495.

Easterly, W. (2002) The Elusive Quest for Growth, Cambridge, Mass.: MIT Press.

FitzGerald, J. and Kearney, I. (2000). "Convergence in living standards in Ireland: the role of the new economy". Economic and Social Research Institute Seminar Paper No. 134.

Feldman, M. (1999) “The New Economics of Innovation, Spillovers and Agglomeration: A Review of Empirical Studies, Economics of Innovation and New Technology, 8, 5-25.

Feldman, M. and D. Audretsch (1999) “Innovation in cities: Science-based diversity, specialization and localized competition”, *European Economic Review* 43, 409 - 429

Girma, S., D. Greenaway and K. Wakelin (2001), “Who benefits from foreign direct investment in the UK?” *Scottish Journal of Political Economy*, 48, 119-133

Glaeser, E.L., Kallal, H.D., Scheinkman, J.A., Shleifer, A., 1992. Growth in Cities. *Journal of Political Economy* 100, 1126-1152.

Görg, H. (2005), "Fancy a stay at the “Hotel California”? The role of easy entry and exit for FDI" *Kyklos*, 58, 519-535

Görg, H. and E. Strobl (2002) "Multinational companies and indigenous development: An empirical analysis" *European Economic Review*, 46, 1305-1322

Görg, H. and E. Strobl (2003) "Multinational companies, technology spillovers, and plant survival" *Scandinavian Journal of Economics*, 105, 581-595

Görg, H. and F. Ruane (1999) US Investment in EU Member Countries: The Internal Market and Sectoral Specialization, *Journal of Common Market Studies*, 37, 333

Gropp, R. and Kostial, K. (2000). The disappearing tax base: is foreign direct investment eroding corporate income taxes?, ECB Working Paper No. 31.

Grubert, Harry and John Mutti (2000). Do taxes influence where U.S. corporations invest?, *National Tax Journal*. 53, 825-839

Gunnigle, P. and D. McGuire (2001) “Why Ireland? A Qualitative Review of the Factors Influencing the Location of US Multinationals in Ireland with Particular Reference to the Impact of Labour Issues,” *Economic and Social Review*, 32, 43-67.

Henderson, J.V. (1986) Efficiency of Resource Usage and City Size, *Journal of Urban Economics*, 19, 47-70.

Hines, J.R. (1995) “Taxes, technology transfer and the R&D activities of multinational firms”, in Feldstein, M., J.R. Hines and R.G. Hubbard (eds.), *The effects of taxation on multinational corporations*, University of Chicago Press.

Hines, J.R. (1996) “Altered States: Taxes and the location of foreign direct investment in America”, *American Economic Review*, 86, 1076-1094

Hines, J.R. 1999, Lessons from behavioural responses to international taxation, *National Tax Journal*, 52, 305-322.

Hines Jr., J. (2003) Sensible Tax Policies in Open Economies, *Journal of the Statistical and Social Inquiry Society of Ireland*, forthcoming.

Jaffe, Adam B., Manuel Trajtenberg and Rebecca Henderson (1993), "Geographic Localization of Knowledge Spillovers as Evidenced by Patent Citations," *Quarterly Journal of Economics*, 108, 577-98.

Jarrett, P. (1999). Review of understanding Ireland’s economic growth. *Economic and Social Review*, 30, 197-200.

Kraemer, K. and Dedrick, J. (2002). *Dell Computer: organisation of a global production network*, Centre for Research on Information Technology and Organizations, University of California, Irvine, USA.

Krugman, P. (1997) “Good news from Ireland: a geographical perspective”, in Alan Gray (ed.), *International perspectives on the Irish economy*, Indecon, Dublin, Ireland.

Kuemmerle, W. (1999a) “Foreign direct investment in industrial research in the pharmaceuticals and electronics industries – results of a survey of multinational firms”, *Research Policy*, 28, 179-93.

Kuemmerle, W. (1999b) "The drivers of foreign direct investment into research and development: an empirical investigation", *Journal of International Business Studies*, 30, 1-24

MacSharry, R. and White, P. (2000). *The making of the Celtic tiger: the inside story of Ireland's booming economy*, Mercier Press, Dublin, Ireland.

Midelfart, K-H., Overman, H., Redding, S. and Venables, A. (2000). "The location of European industry". European Commission Economic Papers No. 142.

Moris, F. (2004) *Industrial R&D Employment in the United States and in US Multinational Corporations*, InfoBrief 05-302, National Science Foundation.

OECD (2005) Science, Technology and Industry Scoreboard.

Ruane, F. and A. Ugur (2004) "Foreign direct investment and productivity spillovers in Irish manufacturing industry: evidence from plant level data", *International Journal of the Economics of Business*, 11, 53-66.

Slaughter, M. (2003). "Host-country determinants of US foreign direct investment into Europe", in Herrmann, H. and Lipsey, R. (eds.), *Foreign direct investment in the real and financial sector of industrial countries*. Springer, Berlin, Germany.

Swensson, D. (1998) "Transaction type and the effect of taxes on the distribution of foreign direct investment in the U.S.", Working Paper, University of California, Davis.

UNCTAD (2004) *World Investment Report: the Shift towards Services*. New York and Geneva: UN.

UNCTAD (2005) *World Investment Report: Transnational Corporations and the Internationalization of R&D*, UN: New York and Geneva.

Van Egeraat, C. and Jacobson, D. (2004) "The Rise and Demise of the Irish and Scottish Computer Hardware Industry", *European Planning Studies*, 12, 809-834.

World Competitiveness Yearbook (2005), Lausanne: International Institute for Management Development

Yoo, K. (2003) "Corporate Taxation of Foreign Direct Investment Income 1991-2001", OECD Economics Department Working Papers 365, Paris: OECD.

Zinnes, C., Y. Eilat and J. Sachs (2001) "Benchmarking Competitiveness in Transition Economies", *Economics of Transition*, 9, 315-353.

Published by TSO Ireland and available from:

The Stationery Office
(mail, telephone and fax orders only)
PO Box 29, Norwich, NR3 1GN
Telephone orders/General enquiries: 0870 6005522
Fax orders: 0870 6005533

You can now order books online at **www.tso.co.uk**

The Stationery Office Bookshops
123 Kingsway, London, WC2B 6PQ
010 7242 6393 Fax 020 7242 6394
68-69 Bull Street, Birmingham B4 6AD
0121 236 9696 Fax 0121 236 9699
9-21 Princess Street, Manchester M60 8AS
0161 834 7201 Fax 0161 833 0634
16 Arthur Street, Belfast BT1 4GD
028 9023 8451 Fax 028 9023 5401
The Stationery Office Oriel Bookshop
18-19 High Street, Cardiff CF10 1PT
029 2039 5548 Fax 029 2038 4347
71 Lothian Road, Edinburgh EH3 9AZ
0870 606 5566 Fax 0870 6065588

The Stationery Office's Accredited Agents
(see Yellow Pages)

and through good booksellers

Printed in Northern Ireland by The Stationery Office Limited

www.tso.co.uk

ISBN 0-33-960188-4

9 780339 601888