



Department of

**Enterprise, Trade
and Investment**

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Economic Research and Evaluation Agenda 2005-2008

March 2005

Stimulating
innovation
enterprise and
competitiveness

**Department of Enterprise,
Trade and Investment**

Economic Research and Evaluation Agenda 2005-2008

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To encourage the development of a high value added, innovative, enterprising and competitive economy leading to greater wealth creation and job opportunities for all.

Introduction and Background

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INTRODUCTION AND BACKGROUND

The Department of Enterprise Trade & Investment (DETI) is responsible for a range of functions, in Northern Ireland including economic development policy (including industrial development, energy, telecommunications and tourism), mineral development, health and safety at work, Companies Registry, Insolvency Service, consumer affairs, social economy, professional economic advice and research and labour market and economic statistics services. Financial and personnel management services are provided centrally within the Department.

DETI also sponsors four agencies, established as Non-Departmental Public Bodies (NDPBs) which play a key role in shaping and implementing economic development policy: Invest Northern Ireland (Invest NI); the Northern Ireland Tourist Board (NITB); the Health and Safety Executive for Northern Ireland (HSENI); and the General Consumer Council for Northern Ireland (GCCNI). Geological Survey of Northern Ireland (GSNI) is also affiliated to DETI. In addition, DETI also acts as sponsor Department to two organisations set up under the Belfast Agreement - InterTradeIreland (ITI) and Tourism Ireland Limited (TIL). Flowing directly from the recently published Economic Vision

for Northern Ireland and the DETI Corporate Plan 2005-08, the Department's activities have been broadly structured to focus on 4 key themes, or drivers, as follows:

- Increase investment in R&D and promote innovation and creativity;
- Promote and encourage enterprise¹;
- Ensure our people have the right skills for future employment opportunities²; and
- Ensure we have a modern infrastructure (energy, telecoms, transport, water and sewerage, towns and cities etc) in place to support business³.

It should be noted that DETI will continue to work closely with a number of other Government Departments that have a major role to play in both policy development and delivery of service aligned to these themes.

DEPARTMENTAL AIM

To promote the development of a globally competitive economy in Northern Ireland.

DEPARTMENTAL OBJECTIVE

To encourage the development of a high value added, innovative, enterprising and competitive economy leading to greater wealth creation and job opportunities for all.

(1) For the purpose of the research agenda this includes competition related issues.
(2) For the purpose of the research agenda this includes wider labour market issues.
(3) Also includes financial infrastructure and development.

Work will continue to build policy-making capacity and capability on a sound evidence base and the results and recommendations of a focussed, high quality research programme.

Continuing the Commitment to Evidence Based Policy Development

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As an integral part of the 2002-2005 Corporate Plan (“Becoming a Modern Economy”) published in June 2002, DETI signalled a new approach for the Department. The establishment of Invest NI and the clarification of the roles of DETI’s other agencies required a new way of working, with a clearer distinction between policy and service delivery needing to be created. In essence, the Department increased its focus on all aspects of the policy dimension, including its role in further strengthening the evidence base to underpin both policy development and evaluation.

This new approach required the development, for the first time, of an integrated research agenda which was published in March 2003. While significant progress has been made in delivering the commitments in this original agenda, with approximately half being significantly progressed or fully completed, the experience of the first research agenda suggests that a more focused approach is necessary.

In addition, internal processes needed to be improved to ensure that the handling of individual projects was robust, that recommendations would flow directly into the policy arena and that future research and evaluation agendas would be appropriately focused. The outcome of this has been the development of two separate protocols to handle research and evaluation from inception through to implementation, plus the establishment of a Research and Evaluation Steering Board which will be the main forum for guiding decisions on the priority of policy related research and managing the delivery of the research and evaluation programmes.

Within the DETI Corporate Plan (2005-2008), the Department reaffirms its commitment to evidence based policy formulation and development, stating that work will continue “to build its policy-making capacity and capability on a sound evidence base and the results and recommendations of a focussed, high quality research programme. The ongoing development of DETI’s Research and Policy

Evaluation Agendas will span the four drivers and will be taken forward in partnership with our agencies and other contributors.”

In addition, the Department recognises the importance of its internal sources of information and will continue to develop its economic and labour market statistics to provide timely and quality coverage of the Northern Ireland economy to inform economic debate and decision-making.

Evidence of this commitment is shown in a number of ways, not least in the establishment of a dedicated research budget which will be used to undertake the core elements of this new agenda. This dedicated budget is in addition to the finances already available to various parts of the Department and the Agencies to take forward research work pertinent to their specific needs (e.g. social economy, health and safety, business regulation etc).

As with the previous agenda, the key aim of this new agenda is to plan and undertake research and evaluation to meet the objective of delivering better policy solutions, which in turn will help promote faster sustainable growth for the NI economy.

Research Agenda: Key Aim

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KEY AIM

As with the previous agenda, the key aim of this new agenda is to plan and undertake research and evaluation to meet the objective of delivering better policy solutions, which in turn will help promote faster sustainable growth for the NI economy.

In doing so the Department will continue to strengthen the links between research and policy development forged during the implementation of the 2002-05 agenda; and, further improve the integration of research and evidence (in its widest sense) with the corporate and business planning process, so that the key recommendations identified by research are fully considered and appropriately adopted in the annual planning process. The full implementation of the protocols developed in the last year (and referred to above) should ensure that this occurs.



The US and China have been the main drivers of growth during 2004.

Wider Economic Context

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GLOBAL ECONOMY

Despite rising oil prices and geopolitical uncertainties, global economic growth was robust during 2004 with the UN estimating the growth in Gross World Product (GWP) of 4.0%, exceeding the expectations of many economic commentators. The National Institute Economic Review (NIER) estimated global GDP growth to be 4.5% in 2004.

The US and China have been the main drivers of growth during 2004. Growth in the Eurozone was low compared with North American and Asian economies, while Japan continued its modest recovery.

Global growth rates are expected to moderate during 2005. The UN expects (GWP) growth of 3.25%, a view supported by other commentators, such as the NIER, who are predicting global GDP growth of 4.1%. Such forecasts are based on a number of factors, not least expected interest rate rises in the US and China to curtail inflationary pressures. Furthermore, oil prices are expected to remain above their 2003 levels due to inflexibility of global supply.

UK ECONOMY

The UK economy has grown steadily since 1992 and despite recent global uncertainties, has continued to grow. The ONS estimates that GDP has risen by 0.7 per cent in 2004 Q4 compared to 0.5 per cent in the previous quarter. This acceleration has been attributed to stronger growth in the service sector. The boom in the housing market appears to have come to an end, with house prices beginning to fall in some regions and forecasts predicting a larger decrease in 2005. In response to this, the Bank of England has maintained interest rates at 4.75% since September 2004.

The UK labour market continues to perform well with some 28.5 million people in employment and an unemployment rate of 4.7 per cent. However, the growth in output per worker has slowed to 0.3 per cent in the third quarter of 2004, compared to growth of 0.8 per cent for the same quarter of the previous year and 1.1 per cent for the previous quarter.

NI ECONOMY

The most recent GVA figures show that the Northern Ireland economy grew by 6% over the year to 2003 compared with a UK average of 5% (these figures have not been adjusted to take account of inflation). Only one region (the East Midlands, at 6.3%) experienced a higher rate of growth than NI. In addition, Northern Ireland's GVA per head index has been rising steadily in relation to the UK, from 79 in 1993 to 81 in 2003.


Overall, the Northern Ireland labour market performed exceptionally well during 2004. Unemployment reached an historical low of 4.5% in the quarter October to December. In addition the number of employee jobs continued to rise steadily, peaking at 687,110 in December 2004, thereby sustaining the broad upward trend of the last ten years.

Despite these encouraging economic indicators, it is important to consider the detail behind these broad-brush measures. For example, falling unemployment must be set against the wider position in relation to economic activity levels per se and, in particular, the fact that NI has the highest economic inactivity rates in the UK (and these continue to rise). The rising numbers of employee jobs also needs to be considered in the context of the sectors driving this growth (i.e. the service sector), with sustained declines in manufacturing and the fact that the majority of the growth in the last four years has been in part time employment. Nevertheless, despite the loss of manufacturing jobs, output has remained strong and currently outperforms the

UK, mainly due to the increase in manufacturing productivity.

The Northern Ireland housing market has experienced strong growth in recent years. The Office of the Deputy Prime Minister estimates that average prices have risen by 15.8 per cent over the past year and the average house in Northern Ireland is now worth £119,413.

It is proposed that the Northern Ireland economy can achieve the Economic Vision by addressing four key drivers of economic growth.

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Challenges

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The Economic Vision sets out a high level challenge for Northern Ireland to be ‘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.’

It is proposed that the Northern Ireland economy can achieve this Vision by addressing four key drivers of economic growth: R&D & innovation, enterprise (and competition), skills and infrastructure (including investment).

The environment in which Northern Ireland operates has changed radically over recent years, both within the domestic market place and in the international arena. Recent years have seen Northern Ireland become a more ‘normalised’ community, and this more stable and peaceful environment has served to increase business confidence in the region while allowing sectors such as tourism to begin to realise their potential. Due to its recent economic success, Northern Ireland has, however, seen much of its

‘special status’ in terms of UK and EU funding substantially eroded. As a result, local businesses are required to make increasing contributions to public services while the nature of public sector financial support begins to change.

In addition, Northern Ireland industries have been experiencing sustained cost competition due to the increasing market share of low cost economies such as China and India. Northern Ireland cannot be expected, nor would it wish, to compete against these economies purely on cost. Therefore the significant challenge facing Northern Ireland business over the next few years is to complete the transition from an economy that competes on cost to one that competes on quality and unique activity.

In order to successfully achieve this transition, an environment conducive to innovation and enterprise must be created. This needs to be an environment in which relevant skills, experience and expertise are readily available and in which finance can be readily accessed to fund ideas which have the potential to

develop into successful commercial projects.

In labour market terms, the headline indicators show that those participating in the local labour market are now more likely to be in employment than before. However, labour market participation in Northern Ireland remains the lowest of all the UK regions and, as a consequence, there is a potentially large untapped labour reserve. Individuals become economically inactive for a variety of reasons, for example, looking after the family or home, full time studies, early retirement or illness. Northern Ireland has approximately 536,000 people collectively in this category and we need to consider how to re-engage such individuals to increase their participation in the active labour market. This is particularly important as we do not wish to see the erosion of individuals' work ready skills. In a similar vein, long-term unemployment remains a persistent feature of the Northern Ireland labour market, with over one third of the unemployed being out of work for more than twelve months.

There are already a number of policies and strategies in place or under development (locally and nationally) to address these labour market issues and work will continue to deliver these over the next few years and achieve the challenges set out in the Economic Vision.

It is also the case that the social and economic well-being of NI will be enhanced by the provision and maintenance of quality infrastructure and

related public services. Investment in public transport, roads, water and sewerage plus modern telecoms and energy infrastructures will deliver both economic and environmental benefits, easing the flow of products, information and people to maintain and increase our competitive position. We need to continue to build on the significant achievements which have already been delivered - including a competitive, sustainable, reliable energy market and 100% broadband access (which is already bringing tangible benefits to both communities and businesses). Future success will be facilitated by fully embedding the £16bn Investment Strategy for NI into the planning and budgeting process and will be measured by reductions in the remaining infrastructure deficits.

Finally, despite being an economy largely based on Small and Medium Sized Enterprises (SMEs), Northern Ireland has the second lowest rate of new firm registrations of the UK regions. The challenge is to increase the level of entrepreneurship within the Northern Ireland population and to create an environment in which these entrepreneurs can realise their potential.

The Way Forward

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The following sections (A to E) outline the high priority research work which will be taken forward as a means of assisting the development of appropriate policy responses to the challenges outlined in the previous section. The intention is to identify the gaps in existing knowledge which need to be filled in order to either develop new policy in the future or refine current policy and/or programmes. In progressing this, it is important to build on the existing body of information available, including the research taken forward as part of the previous agenda, as well as work undertaken by others, and this is reflected in the scope of the planned agenda.

Also, as a result of lessons learnt from implementing the previous agenda and to ensure that the research is appropriately targeted, the approach taken has been to identify potential areas of work at a relatively high level at this stage. Prior to commissioning any of the individual projects, the Department will establish a small multi-disciplinary steering group to look in detail at the up-to-date

literature and scope in more detail the issues to be addressed. This preliminary desk research should ensure that the detailed questions to be posed for investigation are correctly targeted, leading to research that is clearly focused. This steering group will also manage any commissioned research, working closely with the consultants to ensure that the conclusions and recommendations flowing from the work will be of maximum relevance to our policy needs and potential interventions.

The overall research agenda has been structured around the 4 key themes that underpin the Economic Vision for Northern Ireland and the DETI Corporate Plan 2005-08. In addition, to reflect the obvious overlap between a number of the identified drivers of economic growth, an overarching competitiveness stream will also be taken forward.

Sections A to E, as stated above, detail the research identified as the current priorities for the Department during the life of the Corporate Plan. However, in addition, and to show the full scope of

the work that will be undertaken by the Department, Annexes A to F outline further research which may be undertaken during the period 2005-08. While this does not necessarily fall neatly under the 5 streams identified, it nevertheless represents important facets of the work of the Department, some in emerging and developing areas which are critical not only to the Department but also to the NI economy as a whole

The full research agenda will be progressed through five delivery channels and will be managed by the Research and Evaluation Steering Board. The five channels are as follows:

- (i) Economics & Statistics Division, having shaped the research agenda, will have a key role in delivering the higher priority/strategically important elements of the work, through either externally commissioned projects or internal desk research;
- (ii) Individual DETI business areas and the Agencies will take forward research projects to address the needs of their specific areas of responsibility e.g. energy, health and safety, small business development, niche tourism etc. Again, this work will combine externally commissioned and internal projects;
- (iii) The Departmental and Agency statisticians will develop a programme of internal analytical work to complement the agenda;

- (iv) Economics & Statistics Division will work with the Economic Research Institute of NI (ERINI) to develop a programme of research to complement this research agenda and form part of ERINI's core research programme (which is funded and managed by OFMDFM);
- (v) the Department and its NDPBs will seek opportunities to work in partnership with other NI and Whitehall Departments and the UK devolved administrations in areas of mutual interest.

Apart from work directly contracted from ERINI as part of their core research programme, commissioned work will be procured in conjunction with DFP's Central Procurement Directorate. While this agenda identifies a number of issues which we consider to represent the research priorities of the Department at the time of publication, it should be noted that research requirements may change as emerging policy issues are identified over the period (2005-08). The need for flexibility has been recognised in the Research and Evaluation Protocol, as it may not be possible to delay essential work until the preparation of the next agenda. Therefore, underpinning this 3-year agenda, annual research programmes will be prepared to prioritise the overall agenda and build in the flexibility to accommodate unrecognised work as necessary.

The Department recognises that it may have to change priorities during the course of the 3 years and so may not deliver against all items on the agenda as currently prepared.



Research Agenda

Research Agenda

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SECTION A: COMPETITIVENESS STREAM (INCLUDING PRODUCTIVITY)

Ultimately a region's macro-economic performance is driven by the productivity of its economy. This, in turn, depends on the value a region can extract for its goods and services in open markets and the efficiency with which those goods and services can be produced. Competitiveness is therefore directly linked to productivity and, only by improving its productivity performance, will a region be able to support the higher wages and returns on capital which will deliver a higher standard of living for the region's population.

For many years, Northern Ireland's productivity performance has trailed the UK average and narrowing this gap remains a key focus of economic development policy in Northern Ireland. In order for policy interventions to be appropriately targeted, we need to better understand not only the relative importance of the identified drivers of productivity in Northern Ireland, but also improve our knowledge and understanding of policies pursued by other

regions and/or nation states which could be adopted here to the benefit of the Northern Ireland economy.

The 'Competitiveness/Productivity' stream of research will therefore seek to address issues that cut across each of the 4 identified productivity drivers as well as helping to identify where Governments' limited resources can be most effectively targeted.

THE KEY RESEARCH PROJECTS TO BE TAKEN FORWARD ARE AS FOLLOWS:

COMPETITIVENESS PROGRAMME

This research is already underway and represents a three-year rolling programme of work commissioned jointly by DETI, OFMDFM and DFP. An annual report will be produced which measures and benchmarks the competitiveness of NI against a range of appropriate comparable economies, in particular, the UK, RoI and the rest of the European Union.

ATTITUDE TO RISK IN NORTHERN IRELAND

There is a perception that NI businesses, potential entrepreneurs and banks are, in general, risk averse - leading, for example, to low start-up rates and generally a less vibrant business environment. This issue was raised in a recently completed piece of research for DETI and, while the context of this work was R&D, it is likely that risk aversion, if it exists, extends wider than R&D investment. Much of the information available in relation to attitudes to risk is anecdotal and little empirical evidence exists. This project will seek to gather more robust information and assess the position in NI relative to similar regions. At the scoping stage, attitude to risk in the public sector will be considered, although it is unlikely to be investigated in any detail as part of this particular piece of research.

COMPARATIVE ANALYSIS, FORECASTS AND MONITORING OF THE NI ECONOMY

Work has already been undertaken to benchmark Northern Ireland's economic performance against the UK as a whole on a number of indicators, plus provide forecasts for each of the indicators up to the year 2010. This provides an assessment of how the economy is likely to perform in the short to medium term and the work has been used as the basis for discussion with the Economic Development Forum in relation to target setting.

A second phase of this work needs to be developed to further refine the targets and provide information to help shape the changes that may be required if the targets are to be met. A detailed mapping study

of the range of high value added business/financial services activities currently provided within Northern Ireland relative to the UK as a whole will be carried out.

THE 'FUTURE OF PRIVATE SERVICES PROJECT'

Commissioned as part of DETI's first Research Agenda, identified business/financial services activities as one area of the local economy that was underdeveloped relative to other regions of the UK and recommended that further work be undertaken to identify the specific sub sectors involved. This research could be extended to consider the reasons why such activities are under represented in the NI context and, by extension, this should facilitate the development of an appropriate policy response.

The following 3 research areas address issues of importance to the Department and are being developed and progressed as part of the core work programme of ERINI:

PRODUCTIVITY GAP

In order to effectively target policy at increasing productivity it is important to understand why NI's productivity continues to lag behind that of the UK as a whole. There has been some detailed research into Northern Ireland's productivity performance in the past. However, given changes in economic performance and developments in the policy response, policy makers would benefit from more up-to-date evidence on the relative influence of each of the identified drivers of productivity growth on performance. It is likely that other Government

Departments will have an interest in this work and will be involved as appropriate.

An ideal outcome of this research would be a model of the key determinants of productivity across the regions of the UK and in particular within Northern Ireland. This research will be informed by an internal stream of work which will be taken forward to examine issues related to productivity measurement.

INFLUENCE OF POLICY ON NI'S TRADABLE SECTORS

The ultimate aim of this research programme will be to assess how policy can influence positively the performance of tradable sectors of the economy in the areas of innovation, enterprise, skills, productivity & profitability and industrial structure. The Economic Vision sets a challenge for Northern Ireland to foster competitive companies which have the confidence to explore the opportunities to trade in the global market place and achieve high levels of exports and strategic alliances. In order to ensure that NI companies have the skills to adopt and embrace external and internal opportunities to trade, it is important to ensure that the suite of policy interventions on offer is both appropriately targeted and effective in terms of its impact with respect to the tradable sectors of the NI economy.

BUILDING ON EXPORT SUCCESS

This research (again at the firm/plant level) will examine recent export success and how policy can continue to influence NI exporting in manufacturing

and services. This might involve:

- An examination of the factors/economic drivers that distinguish exporting companies from non-exporting NI companies (e.g. ownership, sector, marketing spending per employee);
- Investigation of the impact of existing policy measures on these factors/drivers;
- Estimation of whether the impact of existing policy can be expanded to further increase exporting;
- Estimation of the impact on NI value added, profits, wages and employment if more firms were to export;
- Development of a range of recommendations as to how existing policy delivery could be improved (if necessary) or new policies formulated.



SECTION B: INNOVATION/R&D STREAM

Businesses engage in innovation when they perceive profitable opportunities or are faced by problems and this can lead to productivity growth through the development of more valuable products, services or new processes that increase efficiency. Innovations can also improve people's lives through changes to the environment in which they live and work.

Research and Development involves the practical application of science and engineering to discovering new knowledge and the creation of new and improved products, processes, and services to fill market needs.

At the company level, increasing the amount of innovation or R&D undertaken should result in the introduction of new products and processes. Ultimately, when these events are amalgamated across the whole economy, the impact of higher levels of innovation and R&D will be to increase efficiency, productivity, incomes and therefore economic growth.

THE KEY RESEARCH PROJECTS TO BE TAKEN FORWARD AS PART OF THIS STREAM ARE AS FOLLOWS:

GENERAL EXPENDITURE ON R&D

This work will build on the research undertaken in relation to Business Expenditure on R&D as part of the first research agenda and will cover wider aspects of expenditure in 3 inter-linked parts, as follows:

- (a) **Business Expenditure:** Research to identify the potential to develop some globally competitive sectors in NI. It is anticipated that this will explore the ability of existing policy tools to assist groups of firms as well as individual firms and will build on preliminary work already underway to examine the needs of specific sectors.
- (b) **Further & Higher Education Expenditure:** In collaboration with DEL, research will examine the range and amount of R&D undertaken in Further & Higher Education institutions to assist both Departments in developing policy to support current activity and encourage further R&D in the future.
- (c) **Government Expenditure:** This is the third main area where R&D activity takes place and research to identify the type and amount of R&D undertaken within Government would assist the Department in developing policy which would both support current activity and encourage further R&D in the future. This category includes central and local government and other governmental bodies, excluding higher education.

This work will be supported by a detailed examination of the regular DETI survey of government and private sector expenditure on R&D to investigate, inter alia, the changing profile of R&D expenditure across sectors and how this compares with UK regions and the ROI.

INNOVATION DRIVEN BY COLLABORATION

Innovation is an interactive process and, as such, the encouragement of interaction and collaboration, sharing of ideas and technology should foster greater amounts of innovation. The question to be answered is “What more could policy do to influence collaboration within the Northern Ireland economy?” The research should include a review of research on the effect of firm-to-firm and firm-to-Government collaboration in relation to economic growth. The research should also quantify the level of collaboration within the NI economy and discuss its role in developing innovation. The discussion should also cover the amount of collaboration with indigenous and foreign owned firms.



SECTION C: ENTERPRISE (AND COMPETITION) STREAM

Enterprise is a key driver of productivity growth in a region. Growth of new firms is often associated with the introduction of new technologies, innovative ways of working and increased competitive pressures on other firms. Studies have shown that measures of enterprise and entrepreneurship, such as the numbers of people starting a business in a country or the rate at which individuals invest in start-up companies that are not their own, are correlated with growth.

Competition plays a central role in driving productivity growth by providing strong incentives for firms to innovate and adopt new technologies and working practices. The level of competition in an economy may vary significantly across regions, due to, for example, market size, transport costs, consumer tastes and disposable income. One indicator of intensity of competition in a market is the number of competitors operating in that market. Furthermore, markets with low barriers to entry are more likely to create competitive pressures on incumbent firms. Since 1980 the higher start-up rates in London and the South-East have increased the business stock by over a third, and this increased competitive pressure may go some way to explain the stronger growth performance of this particular region.

THE KEY RESEARCH PROJECTS TO BE TAKEN FORWARD ARE AS FOLLOWS:

BUILDING SMALL FIRM GROWTH CAPABILITY

Work will be undertaken to better understand the characteristics of growth in successful small businesses. This will include an examination of both perceived and real barriers to growth in SMEs in Northern Ireland and, in the future, could be widened to include an investigation of a range of issues pertinent to SME growth e.g. the relevance of management and management training to SME growth.

BARRIERS TO INTERNATIONAL MARKETS FOR TRADABLE INDUSTRIES

The successful transition of the Northern Ireland economy to one based on high value added industries requires local companies to increase their market share in tradable 'knowledge based' manufacturing and service industries. This project would examine the factors which distinguish exporting from non-exporting firms and seek to identify ways in which policy can widen the number of firms that are exporting. It may be that NI firms face particular or exacerbated barriers to entry when seeking to exploit opportunities in profitable international markets. This research will investigate how real these barriers are in a Northern Ireland context, and where barriers are caused by a market failure, recommend appropriate (and cost effective) policy intervention.

IDENTIFICATION OF THE KEY DRIVERS OF ENTREPRENEURIAL ACTIVITY

The Global Entrepreneurship Monitor (GEM) is the largest research project in Entrepreneurship in the world, with some 37 countries participating.

The first Northern Ireland GEM took place in 2002 and initial modelling work was undertaken on the 2003 dataset. The next phase will be to update this analysis with 2004 data and draw UK regional comparisons into the model. This work will be used to inform both the evaluation and further rollout of the Accelerating Entrepreneurship Strategy.

The following research is important to the Department's work on Enterprise, and is being developed and progressed as part of the core work programme of ERINI.

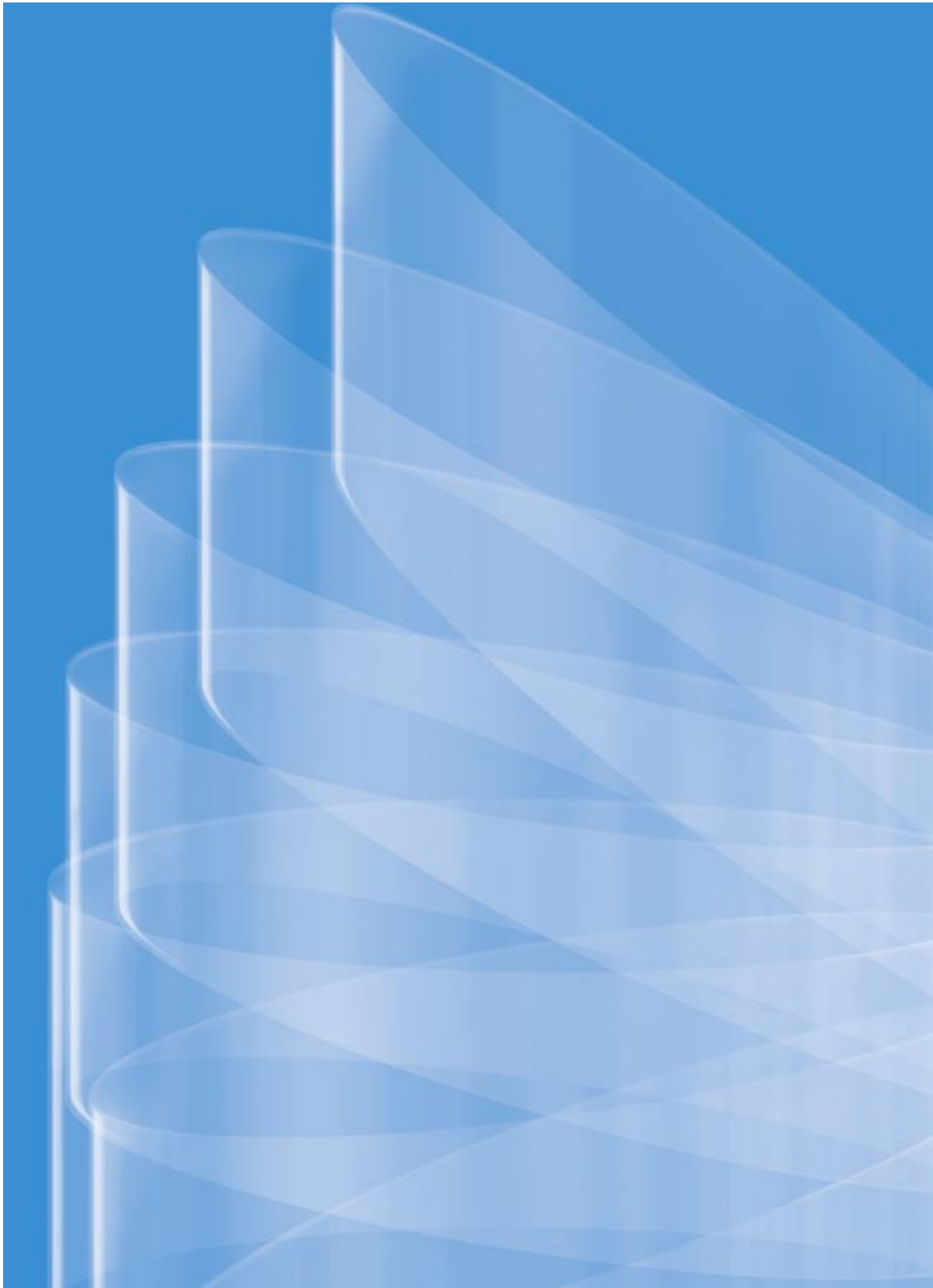
IMPROVING THE EVIDENCE BASE

The increasing importance of SME development has been highlighted within the Northern Ireland Economic Vision, which stressed the economy can no longer rely on Foreign Direct Investment for future economic growth. Improving both the business birth rate and the business turbulence rate is therefore becoming an increasingly important policy priority. However, it has been highlighted that knowledge gaps could be hindering the policy response. ERINI will therefore investigate the business birth rate along the following lines:

- Explore the appropriateness of VAT registrations as a proxy for business start up rates.
- Examine NI's 'true' business birth rate segmented by sector, district council etc.

- Examine the characteristics of successful business births
- Examine the factors that are contributing to low turbulence rates.

This will complement planned (and current) internal work to examine the existing quantitative and qualitative material available to track business start-ups and identify their growth patterns and characteristics. As part of this, consideration will be given to the development of appropriate additional measures.



SECTION D: SKILLS (AND LABOUR MARKET) STREAM

Investment in an individual's skills has been shown to improve their productivity, earning potential, employability and mobility within the labour market. Those with higher levels of skills earn more over their lifetime, are employed for longer periods and are less likely to experience unemployment or inactivity during their working life. At the firm level, investment in the skills of the workforce will contribute to the productivity and profitability of the company. Taking these factors across the economy, it is clear that investment in the skills of the labour force will contribute to greater productivity growth, higher wage levels for those with appropriate skills and, in the long run, increase the level of GDP per capita.

THE KEY RESEARCH TO BE TAKEN FORWARD IS AS FOLLOWS:

IMPACT OF MANAGERIAL SKILLS ON PRODUCTIVITY.

This research, which will be taken forward in collaboration with DEL, seeks to examine the impact of one particular set of skills on productivity (and ultimately business performance) - managerial skills. The research should identify what changes have occurred in best management practise and identify and quantify areas/sectors where management skills shortages occur in Northern Ireland relative to other regional labour markets. The research should benchmark best management practise and the extent to which it is implemented within NI firms.

WORKPLACE SKILLS

This research will be taken forward as part of the ERINI core work programme and will examine the impact of training at the individual plant/firm level by matching plants/firms in receipt of grant support to improve workforce skills and/or management development and attempting to isolate the potential impacts on performance (wages, Gross Value Added, profits etc).

ECONOMIC INACTIVITY: PROFILE AND CHARACTERISTICS

Secondary analysis of the Labour Force Survey will be undertaken to further investigate the rising levels of economic activity in NI (compared with other UK regions, the RoI and selected European regions) and will include, in particular, an examination of female inactivity. This will start as a piece of internal analytical work and review of existing research.

Dependant on the evidence uncovered this may be extended to include commissioned research to further assist policy makers understand the characteristics of the inactive group and, amongst other things, establish whether NI's higher female inactivity rates are due to less flexible working practices, stronger benefits traps or differing cultural values regarding home and family life. Given the clear policy focus within other NI Departments, notably DEL, any further research will be taken forward in collaboration.



SECTION E: INFRASTRUCTURE (AND INVESTMENT) STREAM

It is a well-established finding that investment in physical capital is an important determinant of growth. Thus, investment in physical capital would be expected to be a key factor in determining a region's growth potential.

Moreover, people and firms in deprived communities find it more difficult to access finance to start or grow their business. Venture capital is one key form of finance for new firms and Foreign Direct Investment can also play an important role in stimulating economic performance in a region. On average, foreign-owned firms have higher productivity levels than domestic-owned firms; they can also provide spill-over benefits to firms located on the same area or within the same supply chain.

THE KEY RESEARCH PROJECTS TO BE TAKEN FORWARD ARE AS FOLLOWS:

FISCAL INCENTIVES/TAX CREDITS

This work is already underway and has been commissioned jointly by DETI, DFP and OFMDFM with the aim of assessing, as a starting point, the case for a higher rate of tax credit for stimulating R&D expenditure in NI based on the available evidence and including the extent of market failure. The work will provide an assessment of the likely wider economic impacts of adopting these proposals and may lead to further work to assessing other aspects of regional specific fiscal incentives.

ASSESSMENT OF THE IMPACT OF BROADBAND ON BUSINESS EFFICIENCIES AND EFFECTIVENESS.

By 2005, Northern Ireland will have 100% broadband coverage. This supply side measure will result in Northern Ireland being the leading broadband region in the UK. The ultimate impact on the NI economy of investment in the telecomms infrastructure will be measured by a companies ability to maximise the benefits that can be derived from this business tool. This project will seek to establish benchmark data against which the impact of broadband can be assessed at both company and wider economy levels.

BENCHMARKING FINANCE AVAILABLE FOR BUSINESS START-UPS AND SMES

This study will determine the adequacy of funding sources in NI through all phases of development and consider possible future initiatives, both public and private, to address gaps identified and will include an assessment of the uptake of the revised Small Firm Loan Guarantee Scheme.

RESEARCH INTO THE MOBILITY OF CAPITAL, EMPLOYEES AND TECHNOLOGY IN KNOWLEDGE BASED COMPANIES.

This desk based research will inform the debate around the level and type of support required from Invest NI to attract /retain knowledge-based companies in NI.

FOREIGN DIRECT INVESTMENT

While FDI will continue to be important for the NI economy, global trends would suggest that Northern

Ireland will need to take a focused approach, targeting FDI to provide the greatest benefits for our economy. This research will examine the likely future outcomes of FDI with regard to country of origin, industrial sector, productivity, wider impacts and linkages to the Northern Ireland economy, building upon market analysis assessments currently undertaken by Invest NI.

In addition, the Department will work with ERINI to develop a level of expertise in energy related matters within the Institute - particularly in relation to All-Island research issues.

ENERGY RESEARCH

As set out in the 'Economic Research Agenda for Northern Ireland', published in March 2003, the Department is committed to developing an energy-related research agenda. This work has been progressed and the main areas to be taken forward are as follows:

- Consideration of the evidence gap around the availability and comparability of electricity (and gas) prices;
- In relation to market opening (electricity and gas), investigation of how best to monitor and ultimately evaluate the impact of this; plus, identification of where expertise in this work lies (or could be developed).
- Preparation of a critique of the All-Island energy policy;
- Review of the data available in relation to emissions and efficiency support measures and assessment of the need to undertake any further research or modelling in this area.
- Review of the methodologies for assessing the net benefits of natural gas.

Alongside, and complementary to, the Research Protocol and Agenda, DETI has developed a Protocol on Policy Evaluation.

Evaluation Agenda

8

BACKGROUND

Regular policy evaluation is an integral part of the 'policy cycle' and is essential to provide an evidence base to assess whether policies are relevant and effective. The key objective of evaluation is understanding whether a policy is achieving what it was intended to achieve and whether the original rationale for the policy remains valid as circumstances in the economy change. The findings of a properly conducted evaluation provide essential feedback to prompt additional research and redesign of the policy. The evaluation process is normally undertaken when the policy has been running for some time but planning for evaluation needs to start even before the policy is implemented.

Alongside, and complementary to, the Research Protocol and Agenda, DETI has developed a Protocol on Policy Evaluation. Under this, the Corporate Plan provides the strategic framework within which policy priorities are set, and policy evaluations taken forward.

To make strategic use of the policy evaluation process, the priorities are linked into the risk assessment process of the Department. Priority is given to evaluation of policies identified as at risk of failing to make an effective contribution to the achievement of a corporate objective.

Policy evaluation contributes to the monitoring of progress against the Department's objectives and to the effective development of future policy and the optimum allocation of resources at a strategic level. Higher level policy evaluation takes place at the strategic level, aligned to the four themes of the Economic Vision for NI: innovation, enterprise, skills, and infrastructure. This enables a clearer link to be made between individual project or programme effectiveness, and the achievement of the Vision.

WAY FORWARD

In order to start to implement this approach, an audit will be carried out of the activities of DETI and the NDPBs in terms of Departmental priorities linked to the themes as the basis for drawing

up a programme of evaluations following the methodology set out in this paper.

At the same time, the following high level evaluations are planned or taking place:

TELECOMMUNICATIONS

The NI Executive recognised within its Programme for Government the central role of telecommunications provision in economic development, knowledge based wealth creation, innovation and social equity. To fulfil the potential that telecoms could bring, in 2001 DETI established a Telecommunications Policy Unit to encourage the development of a world-class telecommunications infrastructure in Northern Ireland.

DETI is implementing a range of complementary initiatives designed to progressively develop telecommunications infrastructure, stimulate demand for broadband, and develop broadband applications to both support the knowledge based economy and to promote digital inclusion.

DETI is now carrying out an evaluation of Northern Ireland Telecommunications Policy and this has four specific aims:

- To evaluate the appropriateness of existing telecommunications policy;
- To evaluate how effectively the policy has been implemented to date;
- To assess impacts; and
- To provide a sound basis for the development of future telecommunications policy.

SOCIAL ECONOMY

Government's three year (2004-07) cross-Departmental Plan contains a commitment to undertake an external evaluation of the Strategy in 2006-07, using qualitative and quantitative methods as appropriate and involving social economy stakeholders. It will address, inter alia, the extent to which the Strategic objectives and actions have been achieved; how effectively the various structures to support the sector are operating and what impact this first Strategy for the sector has had, to inform decisions about future policy.

ACCELERATING ENTREPRENEURSHIP

Northern Ireland has been characterised by relatively low levels of entrepreneurial activity. To address this, Invest NI, in partnership with DETI, has developed the Accelerating Entrepreneurship Strategy (AES) for the period 2003-2006. The programmes used to deliver AES includes a number of different programmes, as follows:

- Start a Business Programme
- Community Business Start-Up Programme
- Investing in Women Initiative
- Prince's Trust Programme
- Live Wire Programme
- Export Start Scheme
- Global Start
- 'Go for It' Campaign
- Education and Entrepreneurship
- Social Entrepreneurship (including the Community Business Programme)

By June 2005, Invest NI, working with DETI, will develop a policy framework for assessing the effectiveness of AES. This will involve an audit of data currently being collected, a survey of relevant policies and their effects in NI and elsewhere and the identification of gaps in information that may require further work to ensure that a robust evaluation framework is in place.

R&D/INNOVATION: THE RTD CENTRE OF EXCELLENCE PROGRAMME.

Invest NI have commissioned Aston University to conduct an investigation into measuring the “value added” generated by public support for the RTD Centres of Excellence Programme. The key aim of the project is to measure the technical innovation and knowledge generated by the Programme for the benefit of the host organisation but also whether such innovation and knowledge is levered externally across the Northern Ireland economy as a whole - Spillovers. The final stage in the research will be to Benchmark the impact of public funds on Spillovers in Northern Ireland against existing data from other regions.

Annex

Annex A

Competitiveness Stream

Annex B

Innovation/R&D Stream

Annex C

Enterprise Stream

Annex D

Skills (and Labour Market) Stream

Annex E

Infrastructure (and Investment)
Stream

Annex F

Additional Research Areas

Annex A

COMPETITIVENESS STREAM

INTERNAL ANALYTICAL WORK:

ICT AND BUSINESS PERFORMANCE

An examination of the relationship between ICT and organisational practices, demand for skilled workers & business performance.

There is increasing evidence that adoption of leading edge ICT within companies has a significant impact on business performance. This project will seek to establish the relationship between ICT and changing organisational practices and the subsequent impact this has on both the demand for skilled workers and business performance in NI

EVALUATION OF ECONOMIC DEVELOPMENT POLICIES IN OTHER COUNTRIES

There is much we can learn from the economic development policies of other countries/regions. This project will (initially) involve a literature review, with a focus on regional economies that have successfully been transformed into high value added knowledge based economies and the policies that may have brought such a transformation about. Further work will (if necessary) involve a high level evaluation of the impact of individual policies and the potential these have to work effectively in an NI context.

PRODUCTIVITY MEASUREMENT

In order to inform the work which will be taken forward by ERINI in relation to productivity, an internal stream of work will be undertaken to examine in detail the scale and nature of NI's

productivity in comparison with both the UK average and UK regions. This will primarily utilise Regional Accounts information as a key official source to examine Gross Value Added (GVA) per workforce job for Manufacturing and Service sectors across the UK regions and GVA per hour worked. The research will also compare different estimates of productivity available for Northern Ireland from output based measures such as the Annual Business Inquiry, the Index of Services and Index of Production. This will be informed by the research carried out for DEL in 2004 and the findings of earlier DETI research to compile an hours worked series. Where data is available, comparisons will be made between Northern Ireland and UK regions and with the Republic of Ireland.

ANALYSIS OF HOURS WORKED IN NORTHERN IRELAND

This will include a comparison of current and time series data from the two main sources of hours worked information in Northern Ireland, i.e. the Labour Force Survey (LFS) and Annual Survey of Hours and Earnings (ASHE). A comparison will be made between NI and UK regions plus a range of other countries and consideration given to alternative methods of producing a total hours work series and an assessment of the appropriateness of the current series used in productivity measurement.

CHARACTERISTICS OF HIGH VALUE ADDED FIRMS IN NORTHERN IRELAND

This project will examine Annual Business Inquiry data with a view to establishing the nature and characteristics of high value added firms in Northern Ireland. Initially data for approximate Gross Value Added (GVA) will be examined by industry sector and employment size band. Further work will be undertaken to examine the components of GVA and their relative contribution to overall figures. This work will help identify the extent to which variations in GVA are related to different rates of capital expenditure or employment costs with a view to characterising the fastest growing sectors in the Northern Ireland economy.

CROSS-DEPARTMENTAL WORK EORPA

This is a collaborative research project undertaken at the University of Strathclyde examining the regional policies of Western European countries. DETI (along with DTI and the Scottish Executive) make a (small) financial contribution to the project and will continue to do so. Recent themes have included: regional incentives and the State Aid rules; EU Structural Funds and enlargement and regional policy and regional development in the transition countries. DETI economists will consider how to make more use of the results of these reports - including synthesizing results and recommendations for use by policy colleagues and also working with the partner sponsors to influence future work to secure lessons for Northern Ireland.

Annex B

INNOVATION/R&D STREAM

INTERNAL ANALYTICAL WORK: EXAMINATION OF NI COMPANIES UNDERTAKING R&D

Secondary analysis of the regular DETI survey on government and private sector expenditure on R&D will be undertaken to investigate the changing profile of R&D expenditure across sectors and how this compares with UK regions and the RoI where data sources allow.

The analysis will also seek to examine the relationship between R&D expenditure and company characteristics using existing data from the Annual Business Inquiry and the R&D survey. ABI data has not previously been analysed from an R&D perspective and provides the opportunity to assess R&D activity in a wider context. The desk based research will seek to establish what distinguishes a company prepared to invest in R&D from a similarly sized company in the same sector. It will also investigate R&D investment in view of, for example, company size, sector, level of GVA and employment costs.

Annex C

ENTERPRISE STREAM

BUSINESS/AGENCIES WORK TO BE TAKEN

FORWARD INCLUDES:

BUSINESS FAILURES PROJECT

Very little research has focused on the closure of business and the exit of their owners. There is a tendency to associate 'business closure' with 'business failure', however closure can be a function of other factors such as retirement, illness and the sale of the business for profit. The aim of this research project will be to identify these different causes and specifically investigate the needs of businesses in difficulty and at risk of closure. It will include an assessment of the current support arrangements to meet the needs of these businesses.

INTERNAL ANALYTICAL WORK:

BUSINESS BIRTH RATES IN NORTHERN IRELAND

Northern Ireland's relatively low business birth rate combined with the lower incidence of business failure has resulted in a low rate of business turbulence in the region. The impact of lower level's of enterprise/entrepreneurship was previously highlighted in DETI's research agenda which also outlined how knowledge gaps could be hindering the policy response.

Internal work will be undertaken to maintain and develop a business start up database to better track business start-ups and identify their growth patterns and characteristics using the IDBR database. This work will support the research commissioned from ERINI.

Annex D

SKILLS (AND LABOUR MARKET) STREAM

INTERNAL ANALYTICAL WORK:

NI EARNINGS: THE DIFFERENTIALS

An individual's level of qualification impacts positively on their productivity and therefore their earnings. Annual estimates of earnings in the UK indicate that, overall, earnings in NI are lower than the UK average. While the extent of this varies, depending on a range of factors (e.g. qualification, experience, occupation, industrial sector and gender), a more complete understanding of the individual and composite influence of a range of factors is required. Using information from the Annual Survey of Hours and Earnings plus the Labour Force Survey, a detailed analysis of the influences on earnings in the NI economy will be undertaken which will include appropriate comparisons with other regions and an examination of the nature and extent of low pay. This research should employ appropriate analytical tools and techniques to compare NI earnings with those in other GB regions and also with the Republic of Ireland.

PUBLIC SECTOR JOBS

This research aims to reconcile differences in public sector job estimates from different sources including the Census of Employment, Quarterly Employment Survey, HRMS, Equality Commission and NI Health and Personal Social Services. Detailed analysis will be undertaken in conjunction with other relevant government departments to identify/reconcile differences. This analysis will be followed up with some qualitative research focusing

on individual public sector bodies; this work will assist in identifying problems/issues that data providers have in providing data for DETI labour market business surveys. The qualitative work will also focus on changes that have been introduced as a result of Public Sector Reform Committee requirements (e.g. permanent/temporary split and full-time equivalents) and seek to find out what problems (if any) survey providers may face if further changes were implemented.

QUALITY OF JOBS

Analysis will be carried out to identify areas of job growth/decline within Northern Ireland over the past 5-10 years. The focus of this research will be to identify changes in jobs across sectors taking into account changes/shifts in patterns of work (full/part-time), by industrial activity and splits by male/female. The research will perhaps link in with any relevant information available from other sources of such as the Labour Force Survey and the Annual Survey of Hours and Earnings to give added value /weight to the findings.

Annex E

INFRASTRUCTURE (AND INVESTMENT) STREAM

BUSINESS/AGENCIES WORK TO BE TAKEN

FORWARD INCLUDES:

CAMBRIDGE BUSINESS REVIEW

Analysis of the results from the 2004 GB Cambridge Business Review survey will be undertaken to enhance understanding of the performance and characteristics of the SME sector in NI. This research will provide a range of data on the SME sector allowing examination of issues such as growth, competitiveness, efficiency and innovation.

IMPACT OF REDUCED LEVELS OF EU FUNDING

Invest NI (and DETI Finance Division) will undertake an assessment of the impact of reduced levels of EU funding post 2006.

INTERNAL ANALYTICAL WORK:

SPATIAL ASPECTS OF GROWTH

Using mapping technology, analysis will be carried out on sub Northern Ireland economic data. Areas where growth has been above the NI average will be identified and displayed. Also the areas where growth has been poor will be identified and mapped. Comparisons should be able to be made with the Noble Deprivation Measures released in Spring 2005. Variables for analysis will include data from Census of Employment, claimant count, redundancies and Annual Survey of Hours and Earnings.

ERINI CORE WORK PROGRAMME:

ENERGY RESEARCH

The Department is investigating the potential for ERINI to develop a level of expertise in energy related matters and the topics for consideration are as follows:

- Provision of a summary of the EU Energy policy framework, and a guide as to how other Member States have tackled issues associated with market opening;
- Advice on a monitoring and evaluation framework for market opening in electricity and gas;
- ERINI to identify and build links with the energy research network, including ESRI and the Universities;
- Preparation of a critique of the all-island policy (possibly in conjunction with ESRI);
- Development of an appropriate methodology for assessing the net benefits of natural gas;
- Modelling work to estimate likely energy costs post 2012.

In addition, of relevance, but a lower priority at this stage, the following have also been identified as areas to be taken forward:

- A review of the effectiveness of energy efficiency support measures.
- A review of the effectiveness of fuel diversity and renewables targets.
- Potential review of market structural issues acting as barriers to overcoming fuel poverty.

Should ERINI not be in a position to develop the appropriate level of expertise in this specialist area, the work may be procured from other sources.

Annex F

ADDITIONAL RESEARCH AREA

The research outlined in this section does not necessarily fall neatly under either the competitiveness stream or one of the 4 drivers of economic growth. Nevertheless, these issues represent important facets of the work of the Department, some in emerging and developing areas which are critical not only to the Department but also to the NI economy.

THE RESEARCH PROJECTS WHICH WILL BE TAKEN FORWARD, ALIGNED TO THE RELEVANT DELIVERY CHANNELS, ARE AS FOLLOWS:

BUSINESS AREA/AGENCY WORK:

SOCIAL ECONOMY

The social economy is still a relatively new priority policy area for government and one of the objectives in the Three-Year Strategic Plan for the social economy is to increase our knowledge of the sector and establish its value to the local economy. Very little baseline information exists on the size, scale and value (economic or social) of the sector in NI from which to benchmark, measure growth and build into the overall NI economic picture.

Also, in relation to Social Capital/Value of Sector there is a need to define both the language and the understanding of the terms used to describe the social dimension and to determine a system to measure and record the social benefits/value/contribution of the work of the sector.

Research will therefore be commissioned to

- establish baseline information in relation to the sector; and
- measure the level of social capital/value of the sector

The Finance study undertaken in 2004

recommended two areas for further research

- (a) Research into a diagnostic tool for the social economy sector and
- (b) into the scope to apply market rate community investment funding within NI.

MARKET RESEARCH ON OPPORTUNITIES IN EU ACCESSION COUNTRIES

Invest NI will undertake research to examine the opportunities for NI companies in the accession countries.

INSOLVENCY SERVICE

Work will be undertaken to assess the information needs of company directors to assist them in fully understanding the duties and obligations of a director and to improve the Department's communication with directors and to better disseminate key information.

COMPANY REGULATION BRANCH

A preliminary scoping study will be undertaken to investigate the need for more detailed research in the area of savings protection for independent NI credit unions.

CONSUMER AFFAIRS BRANCH

Building on the OFT Report on Consumer Detriment (February 2000) measure the level of consumer detriment in Northern Ireland in 2005 and identify the major elements that make up that detriment - this would establish a baseline for consumer detriment.

HEALTH AND SAFETY EXECUTIVE

The Health and Safety Executive will take forward the following research related work:

- An investigation of Musculoskeletal Disorders in the Construction Industry.
- A Workplace Health Support Feasibility Study
- A Workplace Health and Safety Survey

NORTHERN IRELAND TOURIST BOARD

Further work on the development of a Tourism Satellite Accounts will be undertaken to, amongst other issues, clarify aspects of stage 1 of the project and move to assess the economic impact of tourism in terms of contribution to Northern Ireland Gross Value Added and number of jobs supported by tourism, including direct, indirect and induced benefits (identifying appropriate multipliers).

In addition, an assessment of the competitiveness of the Northern Ireland Tourism Industry and identification of a program of support to encourage businesses to grow their potential and global competitiveness will be developed.

GENERAL CONSUMER COUNCIL (NI)

The GCC consumer proficiency research (September 2003) established a baseline of consumer proficiency for various sections of society including Section 75 groups. It did not however assess the unique needs of those groups and how those needs might influence the delivery of services. Research into the unique needs of disadvantaged groups with regard to consumer advice and consumer protection issues will be carried out.

The General Consumer Council will also undertake an assessment of financial literacy and adult education skills

ERINI CORE RESEARCH PROGRAMME: INPUT-OUTPUT MODEL

There is limited information available on the structural relationships that exist between different sectors of the Northern Ireland economy. The availability of such information would enable analysts and policymakers to understand how Northern Ireland suppliers across a range of industrial sectors are responding to demands for Northern Ireland products and services, whether these demands originate directly from NI consumers, exports, other industrial sectors, or from government. A better description of the link between final demand and output will enable a clearer understanding of the structures and interdependencies of the different elements of the Northern Ireland economy than is currently available through Regional Accounts.



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and Investment**

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ISBN number 1-902885-09-0

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ISBN 1-902885-09-0



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March 2005

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