



Department for the
Economy
www.economy-ni.gov.uk

SKILLS
TO SUCCEED

Research Agenda 2016-17

July 2016

Contents

1 Introduction	2
2 Research Outputs 2015-16	3
3 Research Agenda 2016-17	6
4 Statistics and Information	12

1. INTRODUCTION

This Research Agenda outlines the Department for the Economy’s (DfE) research priorities during 2016-17. It builds on the research efforts previously taken forward by the Department of Enterprise, Trade and Investment (DETI) and the Department for Employment and Learning (DEL).

Policy Context

The Northern Ireland (NI) Practical Guide to Policy Making¹ states that, “it is crucial that policy decisions should be based on sound evidence.” Relevant economic research therefore needs to be available for the new DfE in implementing existing and developing new strategies, policies and programmes to boost our economy.

This is particularly true in drafting the DfE Research Agenda 2016-17, with a new Programme for Government (PfG), NI Economic Strategy (NIES) and Investment Strategy for Northern Ireland (ISNI) all currently being developed. The NI Executive has also committed to implementing a 12.5% rate of Corporation Tax from April 2018,² an important decision which will impact not only on the development of these strategies, but also this research agenda.

The development of a one-year research agenda is fully in line with the approach being taken by the department more generally in drafting a one-year business plan for 2016-17. Once the new PfG, NIES and ISNI are in place, the department can then look ahead to developing a longer term research agenda for 2017-18 onwards to reflect the priorities outlined in these.

1 <http://www.ofmdfmi.gov.uk/practical-guide-policy-making.pdf>

2 <https://www.northernireland.gov.uk/news/foster-and-bell-welcome-125-corporation-tax-rate>

2. RESEARCH OUTPUTS 2015-16

With a new Department for the Economy having come into operation from May 2016, this research agenda replaces what were previously two separate research programmes for DETI and DEL. The most recent research outputs from the two respective 2015-16 programmes are outlined here.

DETI Research Priorities

DETI published its Research Agenda 2015-16³ in June 2015. This extended the overarching aim from the Research Agenda 2012-15 to deliver economic research projects that would help to strengthen the evidence base in taking forward the NI Economic Strategy. The key research priorities outlined were innovation and R&D, competing in the global economy and encouraging business growth.

DEL Research Priorities

DEL published a progress report of its Research Agenda 2012-15 – “Underpinning Success” – in October 2015.⁴ This document provided both an update on progress to date and captured new strategic research priorities for 2015-16 that had emerged since. The key research areas included skills, innovation, employment and promotion of good working practices.

Completed Projects

Both the DETI and DEL research agendas for 2012-15 delivered a significant amount of research to inform the development of economic policy. The outputs from these programmes are detailed in previous publications and will not be repeated here.

During 2015-16, DETI and DEL delivered a combined total of nine research projects (detailed in full in **Table 1** overleaf). The split of these was broadly even across the two departments.

³ <https://www.economy-ni.gov.uk/publications/deti-research-agenda-201516>

⁴ <https://www.economy-ni.gov.uk/publications/research-agenda-progress-report-2015-16>

Table 1: DETI and DEL Research Outputs 2015-16

Title	Overview	Key Findings
Economic Impact of Corporation Tax	The Ulster University Economic Policy Centre (UUEPC) was commissioned by DETI to estimate the economic impact that a 12.5% rate of Corporation Tax would have on Northern Ireland (NI). This work was based on the Autumn Statement position with a United Kingdom (UK) rate of 18% from April 2020.	The rate reduction to 12.5% is estimated to lead to more than 32,000 additional jobs by 2033, with an economy that is more than 8% larger. Whilst many of the jobs are expected to come from new and existing Foreign Direct Investment (FDI), there is also expected to be a significant impact on domestic firms both directly from the lower tax and from indirect and induced effects.
Skills Barometer	DEL commissioned the UUEPC to provide a detailed understanding of the skills requirements for the NI economy up to 2025, with the aim of ensuring that any skills gaps are identified and addressed.	The biggest skills gap is expected at mid-tier skills levels, with the priority at higher skill levels being to ensure that graduates have the right mix of subject choices that employers need. Conversely, there is forecast to be an over-supply of employees with lower-level skills.
Economic Implications of an EU Exit	DETI joined an independent UK-wide Oxford Economics project modelling the economic impact that a UK exit from the European Union (EU) might have across a range of nine scenarios.	The scope of the study was extended to provide specific results for NI alongside the UK headline figures. This shows that the economic impact of an EU exit on NI can be minimised by agreeing a closer trade relationship with the EU going forward.
UKCES Employer Skills Survey 2015	DEL supported the UK Commission for Employment and Skills (UKCES) Employer Skills Survey 2015. This survey measured the prevalence, character and impact of skills challenges, and detailed the nature and extent of employer investment in skills and training.	Recruitment amongst NI employers increased, but not to the same extent as the rest of the UK. Whilst NI employers were less likely to report skills gaps and under-usage of skills and qualifications, most measures of the quantity or quality of training were below UK levels and there remained a long “tail” of businesses not pursuing high performance working practices.
Cost of Doing Business	DETI Analytical Services Unit carried out an assessment of NI’s relative cost base against international comparators, with a particular focus on GB and the Republic of Ireland (RoI). An in-depth analysis was presented for four main cost areas of labour, energy, transport and property costs.	Despite higher energy and transport costs facing local businesses, lower labour and energy costs mean that NI is overall a relatively cost competitive place to do business. Focusing on the four main cost areas, NI costs were found to be 84% of the UK average and 95% of the RoI in 2015.

Title	Overview	Key Findings
Economic Impact of Further Education	Viewforth Consulting Ltd were commissioned by DEL to provide an analysis of the impact of NI's six regional Further Education (FE) colleges on the economy. The primary aim was to assess the economic impact of FE colleges as businesses and the FE sector in terms of the jobs, output and GVA generated.	Together with the expenditure of their students from outside NI, the six regional FE colleges generated £524 million of output and supported 7,139 FTE jobs in NI. Total NI GVA generated came to nearly £300 million, with both the employment and GVA contribution estimated to be 0.9% of the total NI economy in 2013.
Energy in Northern Ireland	DETI Analytical Services Unit set out to bring together a range of disparate existing and emerging data into a comprehensive and accessible overview of key statistics and information relating to energy in NI.	Data has been provided on the economic contribution of the energy and renewable energy sectors, levels of electricity consumption and trade, amount of electricity generated from renewable sources, total energy consumption, household and non-household tariffs and fuel prices.
Further Education Leavers Survey 2015	DEL Analytical Services introduced this survey to provide information on the destination and potential benefits to individuals approximately six months after completing and achieving a regulated qualification at a local FE College.	Almost one-half (48%) of FE leavers were in paid or self employment six months after completing their FE Course. Most (73%) continued their learning at a FE college, while almost one quarter (24%) had progressed to university. Almost all respondents (94%) said that their course had a positive impact on them.
Business Performance of High Growth Firms	Alongside providing an update of the data on high growth firms for 2012-15, DETI Analytical Services Unit also sought to find out more about these firms by linking together company information from the Inter-Departmental Business Register (IDBR) to the Annual Business Inquiry (ABI) and Manufacturing Sales & Exports Survey (MSES).	Firms categorised as high growth (experiencing turnover or employment growth of 20% over a three year period) performed significantly better than the rest of the business base. From 2008-11, these business experienced much faster turnover, GVA, employment and employment costs growth. Manufacturing high growth firms also demonstrated much faster export and external sales growth.

3. RESEARCH AGENDA 2016-17

This research agenda represents the initial research priorities for 2016-17 of the new Department for the Economy. The focus for this year is on delivering research projects which can inform the development and implementation of a refocused NI Economic Strategy.

Research Priorities

The overall focus of this research programme is **to provide an evidence base for developing and implementing the refocused NI Economic Strategy**. This will involve producing research in the following themes:

1. Competitiveness
2. Trade and investment
3. Skills and employability
4. Innovation and enterprise

Delivery Approach

The research programme for 2016-17 will be delivered through a number of channels. Firstly, through internal research carried out by statisticians and economists within Analytical Services. Second, from our existing funding arrangements with the UUEPC and UKCES. And finally, by commissioning external researchers where specialist knowledge and expertise is required, or by responding to relevant external research proposals.

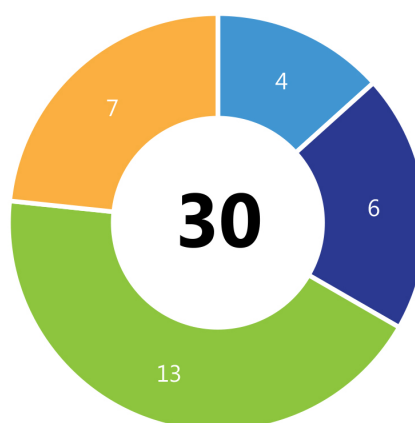
DfE will also work collaboratively with other research providers, such as InterTradeIreland, Invest NI and the Northern Ireland Statistics and Research Agency (NISRA), on relevant projects.

Research Projects

The remainder of this section outlines specific research projects for the department over the coming year under the four priority research themes. Each of these projects will be at different stages, with some nearing completion and some not yet started. A total of 30 research areas have been identified, with an overview of these provided in **Figure 1**. A short summary of each project is provided in the remainder of this section.

Figure 1: Overview of 2016-17 Projects

- Competitiveness
- Trade & Investment
- Skills & Employability
- Innovation & Enterprise



Theme 1: Competitiveness

NI Competitiveness Scorecard

Improving competitiveness is recognised as the overarching goal of the NI Economic Strategy. As a region rather than country, NI does not feature as part of existing international competitiveness reports and therefore progress against this cannot yet be comprehensively tracked.

The Economic Advisory Group (EAG) has therefore commissioned the UUEPC to develop a competitiveness scorecard for NI. This is based on the approach taken by the National Competitiveness Council (NCC) in the RoI, and will provide a tailored assessment of NI's international performance in key areas of competitiveness.

Competitiveness Priority Research

The Competitiveness Scorecard will identify particular priority areas where further research is needed. EAG intend to use the scorecard to inform its future work programme and, as part of this, will identify a project to be taken forward in 2016-17 focusing on a particular area of competitiveness which needs further attention.

Update of Global Best Practice in Economic Development

The NI Economic Strategy published in 2012 was underpinned by a comprehensive and robust evidence base looking at international best practice in economic development amongst small open economies both in Europe and further afield.

The proposed research will revisit the key success factors previously identified in Singapore, RoI, Finland, New Zealand and Estonia to highlight what new policy approaches are being adopted.

Comparison of NI and Scottish Analysis on Economic Impact of Air Passenger Duty

DETI-commissioned research in 2015 found that the economic benefits of reducing or abolishing short-haul Air Passenger Duty (APD) in NI would mostly be offset by the reduction in the block grant from the UK Government. It was therefore not recommended as a priority area for the NI Executive to pursue further.

A more recent report has shown that abolishing APD in Scotland could have significant economic benefits, and work has been commissioned from the UUEPC to understand the methodological differences in the two reports which leads to different conclusions.

Theme 2: Trade and Investment

Competing for FDI with a Reduced Rate of Corporation Tax

Utilising Corporation Tax as a key part of our already attractive FDI proposition will enable NI to compete for different kinds of investments than in the past. Work is being taken forward by PA Consulting to help inform both Invest NI and the wider NI Executive's approach to maximising the opportunities this will bring.

This research will identify those sectors and activities where a low tax rate is likely to have the greatest impact on company decisions, and consider the skills requirements of these. It will also assess key competitors and carry out an assessment to identify NI comparative strengths and weaknesses.

Economic Impact of Corporation Tax Update

An assessment of the economic impact of a 12.5% rate of Corporation Tax in NI from April 2018 was published in April 2016 based on the Autumn Statement position of a UK rate of 18% from 2020. This work highlighted that around 32,000 jobs could be created, with an economy over 8% larger by 2033.

With a further reduction in the UK rate to 17% from 2020 having been announced in Budget 2016, the UUEPC have been asked to update the current work to assess the net impact with a lower UK rate. The sectoral estimates will also be refined at a later time based on the outcome of the PA Consulting research.

Company Survey of Corporation Tax Intentions

With a 12.5% rate of Corporation Tax being introduced in April 2018, survey work will take place in advance to understand the awareness of this reduction by companies, both within and outside NI, as well as the potential benefits this may bring. A range of survey options will be pursued to cover both Invest NI supported companies and the wider business base.

Exploring the Drivers of Outward FDI from the United States

The single largest source of inward investment into NI is the United States (US), and competing effectively in this market will therefore be vital to the success of a 12.5% rate of Corporation Tax. Research is being taken forward under a Fulbright scholarship to understand why US companies seek to invest abroad, the preferred locations they choose and the main factors that influence their decisions.

Understanding NI's Export Base

The introduction of NISRA's Broad Economy Sales and Export Survey (BESES) has provided a range of new information on sales made by local companies both within and outside the region across much of the private sector. Research will take place to understand the implications of these new data and draw out implications for supporting external sales going forward. In particular, this work will seek to provide a greater understanding of the difference in external sales across sectors, markets and size of businesses.

Assessing Future Tourism Investment Needs

The development of a new Tourism Strategy for NI will lead to the introduction of new goals and targets to achieve, particularly in relation to the level of tourism exports (i.e. out-of-state visitor expenditure) that the sector brings. It is therefore planned to take forward research to understand the scale of investment that is required to deliver greater tourism exports, and also the mix of this investment amongst product development, business development and international marketing.

Theme 3: Skills and Employability

Skills Barometer Update

The NI Skills Barometer was published in November 2015 to provide a detailed understanding of the skills requirements for the NI economy up to 2025, with the aim of ensuring that any skills gaps are identified and addressed. This research will continue to be refined and updated going forward taking into account updated forecasts and improved information in some areas. In particular, updates will reflect further work on the impact of Corporation Tax rate reduction and the potential sectoral mix of FDI which may be attracted.

Upskilling in the Labour Market

The well-educated and flexible workforce that NI needs to achieve its economic objectives will require both educating new labour market entrants, as well as upskilling the existing labour force. The Skills Barometer focused on the demand and supply of skills for new labour market entrants and replacement demand, and this research will build on that work to better understand the scale of upskilling of the existing workforce that takes place within NI and the extent to which this can help to meet our skills needs.

Skills Strategy Targets

The introduction of a new Programme for Government and NI Economic Strategy will have implications for Success Through Skills: Transforming Futures, The Northern Ireland Skills Strategy published in 2011. Utilising the Skills Barometer findings, analysis will be carried out to support the development of any new skills targets required over the medium and long term.

Tourism Skills

Given the importance of the local tourism sector, research has been commissioned from Public and Corporate Economic Consultants (PACCEC) to assess the current skills profiles of those working in tourism and identify future skills requirements and imbalances which might need to be addressed. This work will feed into the development of a new Tourism Strategy to help ensure that the appropriate skills exist to support the further development of the sector.

Widening Participation in Higher Education

This is a pilot project testing the feasibility of linking Higher Education Statistical Agency (HESA) and census information in order to better explain the key factors (parents education and occupation; tenure; gender; religion; ethnicity etc) determining enrolment at university. A report has been produced describing the strengths and weaknesses of the approach and phase two of the project is now in preparation. Phase two will address some data deficiencies by adding Department of Education (DE) information on A-level results to the model. The work is being progressed under the auspices of the Administrative Data Research Centre (ADRC).

Working Futures

UKCES produces a series of quantitative assessments of the employment prospects in the UK labour market over a 10 year horizon. The latest is Working Futures 2014-24, which considers the demand for skills by occupation and qualification, although the supply side is also considered. Its prime objective is to provide useful labour market information that can help to inform policy development and strategy around skills, careers and employment.

The results are intended to provide a sound statistical foundation for reflection and debate among all those with an interest in the demand for and supply of skills. This includes individuals, employers, education and training providers, as well as the various agencies and departments of government. Separate NI projections are produced, and this research work is being supported by DfE.

Employer Perspectives Survey 2016

The UKCES carries out an Employer Perspective Survey (EPS) consisting of some 18,000 telephone interviews across UK employers. The survey collects employer views on methods of recruitment, skills initiatives and training currently on offer in the UK, and decisions to use them, or not. This work is being supported by DfE and further analysis on the implications of findings for NI will be carried out once available.

Factors Contributing to Successful Student Outcomes in Further Education Colleges

Retention and achievement rates and, as a consequence success rates, have been improving steadily in the FE sector in recent years. However, significant variations in the rates of successful outcomes are evident within the sector; for example, across different student characteristics, subject areas and colleges.

This research, commissioned from the UUEPC, will report on the broad factors which affect the likelihood of success of final year enrolments in courses potentially leading to a regulated qualification from the FE sector in NI over the period 2012-15. Follow-on work assessing factors contributing to different outcomes in Essential Skills qualifications may also be taken forward.

Vocational Education and Training and Adult Learning

The aim of this study by the Organisation for Economic Cooperation and Development (OECD) is to support the work of the department to develop its apprenticeship system with the best international evidence. The research is part of a wider offer of support to OECD countries and will draw on an extensive evidence base on apprenticeship systems across OECD countries.

It will offer international evidence on areas such as employer engagement in apprenticeship and traineeship, development of higher level apprenticeships through vocational education and training and more general incentives for employers to invest in training including management and leadership training.

Further Education Leavers Destinations

The FE Leavers Survey was designed to provide information on the destination and potential benefits to FE Leavers, approximately six months after completing and achieving a regulated qualification at an FE college in NI.

The first report was published in December 2015 and developmental work for leavers in the 15-16 academic year is in progress. This will incorporate a module of questions on the motivation of RoI students to attend NI FE colleges and will feed into the North-South student flows working group.

Engaging Employers in Skills Development and Utilisation at Local Level

The department is participating in an OECD country review which will seek to identify good practices for employer engagement in the areas of both developing and utilising skills. The research will examine successful strategies that have been taken at the local level to increase employer participation in apprenticeship and work-based training programmes. It will also assess how these can be applied to apprenticeships outside of traditional sectors, and what incentive and financing mechanisms can be used to increase apprenticeship participation, particularly amongst Small and Medium Sized Enterprises (SMEs).

Millennium Cohort Study: Life Chances of NI 17 year olds

The Millennium Cohort Study has been tracking UK children from birth (9 months) since 2000, with an NI sample of 1,955 children. The families will be surveyed again when the child is aged 17, providing an opportunity to monitor the health and educational outcomes of children from different socio-economic backgrounds at different stages in their development.

DfE will be working with the Centre for Longitudinal Studies (CLS) to produce an analysis of the NI sample with UK comparisons. It is expected that the information will be relevant to policies such as widening participation in higher and further education, social inclusion, risk of becoming Not in Education, Employment and Training (NEET) and the impact of family circumstances on childhood outcomes.

Management and Leadership

Management and leadership represents a key skills requirement for businesses. Research being taken forward by NVision Consulting will examine how management and leadership skills in NI have been improving and what remains to be achieved. This work will inform the future development of the Skills Strategy in relation to management and leadership skills.

Theme 4: Innovation and Enterprise

Economic Implications of National Living Wage

The National Living Wage (NLW) of £7.20 per hour was introduced in April 2016 for all workers aged 25 and over and is expected to rise to around £9 per hour by 2020. Multiple projects are being carried out to understand the extent to which these rises will impact on businesses and workers.

The first of these projects will outline the direct impact of increased wages on both employees and employers by sector, occupation and work pattern. Further research will then be carried out to estimate the broader impact on the NI economy.

High Growth Firms: Policy Paper

A total of seven research papers have been published to date providing an understanding of NI's high growth firms – defined as those businesses which exceed 20% turnover or employment growth over a three year period. This policy paper will draw on these reports to provide an overall assessment of the policy implications of this body of work.

Benchmarking Regions for Horizon 2020

Horizon 2020 is the largest EU research and innovation programme ever, funding nearly €80 billion of research during 2014-20. The success of regions to attract this funding is dependent on a complex range of factors, and research is being carried out to understand what these factors are and identify regions across the EU which provide a suitable benchmark for NI to assess how well it is performing at attracting this funding.

Economic Contribution of Tourism

Tourism is not a traditional economic sector as it relates to businesses in multiple sectors (such as retail, hospitality and recreation) which serve both tourism and non-tourism customers. The availability of information on the economic contribution of tourism is therefore less readily available than for other traditional sectors. However, the development of NI Input-Output (IO) tables by NISRA provides an opportunity to begin to more routinely measure the economic contribution of the sector, and initial work is planned to begin to take place to allow this to happen.

Advanced Manufacturing, Materials and Engineering Study

MATRIX – the NI Science and Industry Panel – has commissioned a study on Advanced Manufacturing, Materials and Engineering (AMME) which will assess current NI strengths in the sector and market opportunities it can exploit. Once this report is published, further research and analysis will be required for the development of an AMME strategy and action plan.

Technology Capability Study / Science & Innovation Audit

The first Technology Capability Study for NI was published in 2008 and sought to identify and qualify existing NI research strengths and capabilities for MATRIX that can be exploited. The objective of this update study will be to create a “map” of NI high technology activity to inspire and guide further research and inform policy initiatives to strengthen innovation across NI.

It is intended that a key output of the study will be a web based information management tool, enabling DfE, MATRIX and other stakeholders to make full use of the data in order to get more meaningful insights through advanced analytics and visualisation tools/ dashboards.

MATRIX Foresight Programme

MATRIX reports to the DfE Minister on matters pertinent to the exploitation and commercialisation of science, technology and R&D. Its role is to oversee research to help the NI government build an evidence base for future science and Research and Development (R&D) policies within the region's wider innovation policy.

In addition to the AMME study, MATRIX has also carried out reports into life and health sciences, ICT/ digital, agri-food, sustainable energy and telecoms. A further three areas – food science, digital media and built environment – have been identified by MATRIX as the focus for the next suite of foresight studies.

4. STATISTICS AND INFORMATION

Research and analysis needs to be underpinned by robust statistics. DfE Analytical Services produces a range of statistical publications to meet the needs of policy makers and external stakeholders, alongside engaging with other statistical providers of economic information.

DfE Statistics

A wide range of official and national statistics are produced by DfE to support the research programme and provide information to both internal and external stakeholders. These include the following areas:

- Apprenticeship NI
- Essential Skills enrolments
- Essential Skills qualifications
- Electricity consumption and renewable generation
- Further Education enrolments
- Further Education leavers
- Higher Education business and community interaction
- Higher Education enrolments
- Higher Education qualifications
- Higher Education leavers destinations Higher Education performance indicators Programme-led apprenticeships
- Training for success
- UCAS applications and applicants accepted

A publication schedule for DfE statistics during 2016 and 2017 can be found at this [link](#).

Other Statistics

A wide range of non-DfE statistics produced by NISRA and others will also be vital to informing the research programme, and DfE research staff will work with other departments where opportunities arise are to ensure there are appropriate statistics and information available. This will come through participation in expert user groups, input into statistical development and more general engagement where appropriate.



Department for the
Economy
www.economy-ni.gov.uk

SKILLS
TO SUCCEED

THE DEPARTMENT:

Our aim is to promote learning and skills, to prepare people for work and to support the economy.

This document is available in other formats upon request.

Further information:

telephone: 028 9052 9230

email: analyticalservices@economy-ni.gov.uk

Published research projects can be found on the **DfE website**