



Department of
**Enterprise, Trade
and Investment**

www.detini.gov.uk



RESEARCH

AGENDA 2015/16

DETI ANALYTICAL SERVICES UNIT
June 2015

C CONTENTS

CONTENTS 1

1 INTRODUCTION 2

2 RESEARCH AGENDA 2012-15 4

3 RESEARCH AGENDA 2015/16 6

ANNEX A: COMPLETED DETI RESEARCH 2012-15 10

ANNEX B: OTHER RELATED RESEARCH 2012-15 18

1 INTRODUCTION

DETI is committed to ensuring that policy decisions are informed by a robust evidence base. This document summarises the research that was carried out under the previous Research Agenda and identifies upcoming research priorities over the next year.

The importance of research

Research is central to good policy making. The Northern Ireland Practical Guide to Policy Making¹ states that, “it is crucial that policy decisions should be based on sound evidence.” Policy makers should have access to robust research evidence to underpin all stages of the policy cycle as effective research promotes the dissemination of lessons learned from examples of best practice elsewhere and enables the benchmarking of performance with suitable comparators.

The Department of Enterprise, Trade and Investment (the Department) recognises the importance of evidence-based policy development. The DETI Corporate Plan 2011-15² included a committed to an “evidence based approach to the development of policy” which has been met through the delivery of the 2012-15 Research Agenda.

A new DETI integrated Corporate/Business Plan is being developed for 2015/16. In line with the approach being taken in extending the Programme for Government (PfG) for an extra year, the 2015/16 DETI Plan will extend and updates the DETI Corporate Plan 2011-15 to cover up to March 2016. Therefore the Departments commitment to evidence based development of policy remains.

Economic context

The research carried out by the Department has to be linked to economic policy priorities. When the last Research Agenda was published in June 2012³, the NI economy was still being held back by the economic downturn and the Economic Strategy had just been published prioritising both “rebuilding and rebalancing” the economy.

Since then, there has been significant progress made in rebuilding the economy. Local economic conditions have improved with 28,300 net new jobs added since March 2012 (11 consecutive quarters of growth) and a reduction in the number of claimants of 18,600 since December 2012 (26 consecutive monthly falls). Whilst there are undoubtedly still challenges, the economy is in much better shape now than was the case at the launch of the previous Research Agenda.

With regards to the longer term rebalancing of the NI economy, the most important development has been the success in securing the devolution of powers to vary the rate of Corporation Tax (subject to implementation of the Stormont House Agreement⁴). This has the potential to make a significant contribution to addressing NI’s economic competitiveness in the future.

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

² http://www.detini.gov.uk/deti_corporate_plan_2011-2015_.pdf?rev=0

³ <http://www.northernireland.gov.uk/news-deti-100712-foster-launches-new>

⁴ <https://www.gov.uk/government/publications/the-stormont-house-agreement>

In the absence of this kind of major stimulus, the local economy has had successes in some areas in recent years but has continued to face key challenges in others. For example:

- **Research and Development** (R&D) spending has continued to rise, increasing by 12% in 2012 and a further 6% in 2013 to reach £616m;
- Despite our R&D successes, **wider innovation** performance has been less positive and NI has the lowest proportion of innovation active firms of all UK regions;
- Whilst **exports** have increased – by 4.9% in 2014 from 2010/11 – this is at a lower rate than envisaged in the Programme for Government;
- NI has continued to achieve significant **FDI** successes, securing 2.8% of total UK FDI projects in 2013/14 and experiencing the second highest growth outside of London; and
- Local **business start-ups** continue to lag behind elsewhere, with business birth rate in 2013 at 8.7% (as a proportion of total active enterprises) being the lowest of the UK regions and well below the UK average of 14.1%.

Structure of this document

This Research Agenda acts as both a summary of the research carried out during the previous 2012-15 programme (Section 2) and an overview of DETI's research priorities during 2015/16 (Section 3). Further information on research projects that have been completed by the department to date can be found in Annexes A and B.

2

RESEARCH AGENDA 2012-15

The department's research programme during 2012-15 has delivered 22 projects, with 19 of these being published to date. The majority of these project have been carried out internally, which marks a significant shift away from using external researchers as in the past.

Research priorities

The previous DETI Research Agenda was published in June 2012⁵. Its overarching aim was to deliver economic research projects that would help to strengthen the evidence base in taking forward the NI Economic Strategy⁶. In line with the Strategy themes, the key research priorities outlined were:

1. Innovation, R&D and Creativity
2. Competing in the Global Economy
3. Encouraging Business Growth

Research outputs

The DETI Research Agenda 2012-15 has delivered 22 research projects, with 19 of these being published to date. Table 1 highlights that the latest research programme has delivered significantly more projects than any other to date.

Caution must be exercised in comparing these numbers as projects will differ in terms of size and scale (the Research Agenda 2008-11 for example was focussed on very large-scale projects), but it is clear that 2012-15 has been the most productive research programme that the Department has carried out in terms of outputs.

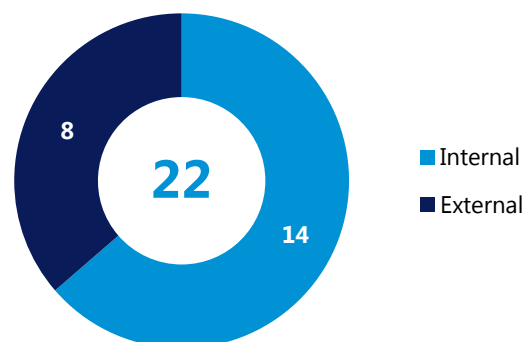
Table 1 – Past DETI research outputs

Research Agenda	Projects
2005-08	12
2008-11 (including 2011/12)	6
2012-15	22

Delivering projects

DETI has historically commissioned external researchers to deliver projects under past Research Agendas. However, the Department has invested in its internal research expertise and the 2012-15 research programme has seen a significant shift towards research being carried out internally by economists and statisticians within DETI Analytical Services Unit (ASU). As shown in Figure 1, almost two-thirds of research projects completed in 2012-15 were carried out internally.

Figure 1 - Split of 2012-15 research



⁵ http://www.detini.gov.uk/deti_research_agenda_2012-15.pdf

⁶ <http://www.northernireland.gov.uk/ni-economic-strategy-revised-130312.pdf>

In addition to building up internal research expertise, the Department also began funding the Ulster University Economic Policy Centre in 2013. The Centre is an independent economic research centre focused on producing evidence based research to inform policy development and implementation. This new relationship allows DETI to access the expertise within the Centre to deliver on the Department's research programme.

Completed projects

Of the 22 projects completed under the 2012-15 research programme, 20 have been published to date. Details on each of these projects have been included at Annex A, along with web links to each of the respective published reports. Selected highlights include:

- **Economic Impact Assessment of Air Passenger Duty (APD).** This work was carried out by the Ulster University Economic Policy Centre and assessed the economic benefits and costs of reducing or abolishing APD. It found that there was not a strong economic case for doing this.
- **Growing and Diversifying the Export Base.** RSM McClure Watters carried out a major study into areas of opportunity to grow export sales in both existing and new markets. This research is being used to inform the development of the new Exports Action Plan and will be published as part of the evidence base alongside it when released.
- **Future of Early Stage and Growth Finance.** In response to a recommendation made by EAG, DETI appointed SQW Ltd to look at best practice in developing early stage finance elsewhere and recommend how government can facilitate the market to develop locally. This research will be published in summer 2015.
- **Business Access to Finance.** DETI ASU utilised the InterTradeIreland Business Monitor to assess the latest (2014) position with regards business access to finance. This showed a marked improvement in both business perceptions and success rates at obtaining finance from 2010 and 2012.
- **High Growth Firms.** DETI ASU has carried out a major research series identifying the characteristics of a small number of high growth firms that contribute a disproportionately large amount of growth in the local economy. This work will continue into 2015/16.
- **Micro Business Innovation.** DETI ASU carried out a pilot survey into innovation in micro businesses, an area where information has never been available before. This found high levels of innovation amongst our smallest businesses, and identified particular barriers facing them in innovating.
- **Evaluation of Selective Financial Assistance (SFA).** SQW Ltd and Aston University carried out an evaluation of SFA over the period 2004-11. It found that the intervention had delivered significant economic benefits – with a return on investment of 5 to 1 – but suggested a number of operational improvements going forward.
- **Developing Open Innovation.** Professors Stephen Roper and Nola Hewitt-Dundas carried out research into open innovation and collaboration in NI. This found that levels of open innovation are much lower here than elsewhere in the UK, and recommended that additional support should be available to act as an “independent honest broker” for companies to identify potential innovation partners.

In addition to core research carried out by the Department, further information on relevant projects carried out by the Economic Advisory Group (EAG)⁷, the NI Science and Industry Panel (MATRIX)⁸ and Invest NI⁹ can be found in Annex B. Whilst not covered by this research programme, InterTradeIreland also produces a significant body of economic-focussed research, and information on outputs during 2012-15 can be found on its website¹⁰.

⁷ <http://www.eagni.com/publications/>

⁸ <http://matrixni.org/reports/>

⁹ <http://www.investni.com/about-us/media-centre/publications-and-reports.html>

¹⁰ <http://www.intertradeireland.com/researchandpublications/>

3

RESEARCH AGENDA 2015/16

A one-year Research Agenda has been set for 2015/16 continuing the same research themes as in 2012-15. Projects will mainly be delivered either internally or through commissioning the Ulster University Economic Policy Centre. A total of 13 projects have been identified, combining existing projects that are still ongoing with new projects that are just starting.

Research priorities

Preparations are underway for DETI to merge with the Department for Employment and Learning (DEL), and so the future research priorities from 2016/17 onwards will be identified from the perspective of a new Department of the Economy. In the interim, a one year agenda has been produced to set out the research the Department intends to take forward 2015/16.

With the current Programme for Government and Corporate Plan being extended for another year, DETI's research priorities for 2015/16 will remain consistent with those during 2012-15. This means that research will mainly continue to inform the key Economic Strategy themes of innovation, competing in the global economy and business growth.

Delivery approach

The research programme for 2015/16 will continue the shift away from procuring research externally. The two main delivery channels will therefore be:

- **Internal research** carried out by statisticians and economists with DETI ASU; and
- Through our existing relationship with the **Ulster University Economic Policy Centre**.

However, DETI will continue to utilise external researchers where appropriate to bring in specialist expertise where needed. DETI will also continue to engage with other related research providers such as Invest NI, EAG, InterTradeIreland and MATRIX on projects of mutual interest

Ongoing research

The initial priorities for 2015/16 will be to complete ongoing research that was begun in 2012-15. Three research projects remain ongoing and will continue to be progressed during 2015/16. These are:

Economic Impact of Corporation Tax

With the NI Executive having been successful at securing the devolution of powers to vary Corporation Tax (subject to the full implementation of the Stormont House Agreement), this research will consider the economic merits of a reduction in the rate to 12.5% based on the latest available evidence. The Ulster University Economic Policy Centre is carrying out this research and will build on the previous EAG work carried out in May 2011. The research will:

- Provide baseline NI economy forecasts for growth, employment, productivity and living standards over the next 20 years;
- Estimate the economic impact that reducing the CT rate to 12.5% could have on the NI economy over the next 15-20 years, taking into account the direct, indirect and induced effects; and
- Quantify the economic impact in terms of economic growth, employment, living standards, investment, productivity and exports.

Cost of Doing Business in NI

Costs have been a key issue for companies during the economic downturn, and are a core part of economic competitiveness. DETI ASU (with assistance from the Ulster University Economic Policy Centre and InterTradeIreland) are working to produce an up-to-date assessment of the cost base facing local companies. This research will:

- Assess which costs represent the greatest burden to businesses and how they have changed in recent years;
- Benchmark key business costs for NI against appropriate comparators; and
- Provide an overall assessment of our relative cost competitiveness compared with GB and ROI.

EAG Competitiveness Report

Improving economic competitiveness has been identified in the NI Economic Strategy as its overall measure of success. The Ulster University Economic Policy Centre has therefore been commissioned by the EAG to develop and report on the competitiveness of the NI economy. This research will:

- Identify those areas of competitiveness that are most important for a regional economy;
- Develop a tailored framework for measuring economic competitiveness in NI against relevant comparators and identify data sources which can be used to benchmark these; and
- Produce an overall assessment of NI's economic competitiveness against other economies and identify policy priorities.

New research

In addition to completing the three projects highlighted above, the research programme for 2015/16 includes a further 10 projects that are planned for the year ahead. These are:

Competing for FDI with Low Corporation Tax

The Corporation Tax (Northern Ireland) Act 2015¹¹ has been published and passed to enable the devolution of rate-varying powers to the Northern Ireland Executive. Attention is now turning to how NI can successfully compete for Foreign Direct Investment (FDI) using a reduced rate of Corporation Tax as a primary tool. DETI, Invest NI and DEL will commission external research which aims to:

- Identify which FDI sectors that are most likely to be influenced by low Corporation Tax and should form the basis of future Invest NI activity;
- Assess what other key factors (other than Corporation Tax) are most important in these sectors for investors making location decisions; and
- Review NI's competitiveness for investment in these areas and identify priorities for the NI Executive to maximise the impact of a reduction in Corporation Tax on FDI.

Company Survey on Corporation Tax

A significant body of work has been carried out to date in relation to the economic impact of a reduced rate Corporation Tax. To supplement this, DETI intends to survey companies and provide further information on the benefits that this could bring. The survey will aim to:

- Understand how a reduced rate of Corporation Tax might influence the investment intentions of local companies;
- Identify what types of local companies a reduction in Corporation Tax is likely to have the greatest impact on; and
- Investigate how aware companies outside of Northern Ireland are of the NI Executive's intention to reduce Corporation Tax.

¹¹ <https://www.gov.uk/government/news/new-bill-to-devolve-corporation-tax-in-northern-ireland>

Attracting US FDI with Low Corporation Tax

The US is the main source country of FDI into NI, and the region's future success at securing investment will be largely determined by its ability to attract US companies here (using reduced Corporation Tax as a key incentive). This project is subject to support from the Fulbright Commission¹² and aims to:

- Review global FDI trends and issues particularly relating to US outward investment which will impact on NI's ability to attract FDI in the future;
- Explore the drivers of overseas investment decisions made by US companies, with a particular focus on sectors that Invest NI currently targets and may target with reduced Corporation Tax; and
- Identify lessons for NI on how future FDI strategy in relation to the US could be developed further.

Understanding NI's Export Base

NISRA published in a new Broad Economy Exports (BEE) measure in March 2015 which has significantly expanded the coverage of export statistics for NI by including a wider range of sectors and activities than was previously available. To better understand the new data source, DETI ASU aims to:

- Explore the composition of exports and external sales across each sector of the NI economy;
- Identify how reliant sales in each sector are on a small number of companies and how many of these work with government organisations such as Invest NI and InterTradeIreland; and
- Highlight the implications for government in supporting exports and external-sales for each different sector.

High Growth Firms

DETI ASU has undertaken a significant body of research on high growth firms in NI during 2012-15 to better understand the characteristics of companies that are driving growth in the local economy. Three discrete further projects are planned to:

- Examine the survival over time of high growth business compared with the wider business base, and identify whether any differences in survival are linked to underlying business characteristics;
- Link the database on high growth firms with other business survey data to understand the relationship between growth and GVA, sales, exports and R&D spending; and
- Consolidate all the available analysis on high growth firms into a synthesis report which outlines the policy implications for supporting companies to achieve and maintain faster growth in NI.

Identifying Benchmarks for Horizon 2020

Horizon 2020 is the main EU Research and Innovation programme, with nearly €80 billion of funding available over seven years (2014 to 2020). This is a highly competitive programme and success will be determined by the existing research capability and infrastructure in place within regional economies. This research project aims to:

- Review the performance of NI along with a range of comparator regions receiving funding under the previous R&D funding mechanism, the EU's Seventh Framework Programme for Research (FP7);
- Highlight the key factors that helped to determine success in gaining EU R&D funding; and
- Identify regions that are appropriate benchmarks for NI in benchmarking success at attracting Horizon 2020 funding.

¹² <http://www.fulbright.org.uk/>

Low Carbon and Renewable Economy Survey

The Office for National Statistics (ONS) with other key stakeholders including the devolved administrations, the Department for Energy and Climate Change (DECC) and the Department for Business Innovation and Skills (BIS), is leading on the development and implementation of a new UK-wide statutory business survey attempting to provide an estimate of the economic contribution of the Low Carbon and Renewable Energy ('green') economy.

DETI ASU is providing a central point of contact for NI participation in this survey, input and support into the development, implementation and analysis of this new survey and will take forward any secondary NI-level analysis as appropriate. ONS intend to publish the initial headline findings for the UK as a whole and the devolved regions in December 2015.

Compendium of Energy Statistics

At present, there is no single comprehensive source of information available on energy in NI. DETI ASU intends to produce a compendium of energy statistics which act as a resource for both policy-makers and the public to be aware of the latest trends and information on energy.

ANNEX A: COMPLETED DETI RESEARCH 2012-15

Links to the published reports can be found by clicking on the title heading.

Title	Overview	Key Findings	Published
Future of Early Stage and Growth Finance	In response to a recommendation made by EAG, DETI appointed SQW Ltd to look at best practice in developing early stage finance elsewhere and recommend how government can facilitate the market to develop locally.	<ul style="list-style-type: none">This research has been completed and will be published later in 2015.	TBC 2015
Growing and Diversifying the Export Base	As the NI Economic Strategy prioritises export-led economic growth, DETI commissioned RSM McClure Watters and OCO Global to assess how NI can grow and diversify its current export base. This work considered both existing and emerging markets to identify further opportunities for export growth.	<ul style="list-style-type: none">This research has been completed and will be published alongside the forthcoming Export Strategy Action Plan.	TBC 2015
Business Access to Finance 2014	The EAG's initial review of access to finance for businesses within Northern Ireland was carried in March 2013. Given the upturn in the economy since then, DETI re-ran the finance e survey to gauge the extent to which conditions in relation to access to finance had changed.	<ul style="list-style-type: none">A much higher proportion of Small and Medium-sized Enterprises (SMEs) reported that they were 'growing' in 2014 (40%) compared to 2012 (16%).In 2014 just one in eight SMEs (13%) described themselves as 'reducing/survival at all costs/winding down', a significant reduction from almost half (45%) of all SMEs in 2012.Some 40% of SMEs agreed that banks are currently lending to viable businesses, a large increase from 28% in 2012.	March 2015

Title	Overview	Key Findings	Published
Economic Impact Assessment of Air Passenger Duty	DETI, in conjunction with DFP, commissioned the Ulster University Economic Policy Centre to conduct a detailed economic impact assessment on the impact of air passenger pricing, including short haul Air Passenger Duty. Specialist aviation consultants York Aviation were appointed to provide expertise on the passenger forecasts.	<ul style="list-style-type: none"> • There is not a strong case for the devolution and reduction of short haul Air Passenger Duty (APD) in NI. • A reduction in APD by 50% could deliver a small positive net economic benefit of £1.8 million by 2026. • This benefit would be very small in economic development terms and other policy levers – such as Corporation Tax – would provide much stronger economic benefits. 	March 2015
Financial Capability 2014	The Programme for Government 2011-15 committed to develop and implement a Financial Capability Strategy to address issues and challenges facing consumers. DETI supported this by developing a detailed evidence base on financial capability in Northern Ireland during 2014.	<ul style="list-style-type: none"> • The large majority of respondents (90%) are currently getting by alright or quite/very well financially. • The majority of respondents (61%) have some savings set aside for a rainy day but almost two in five (39%) do not. • The three things respondents tended to keep a close eye on most were changes to pensions and benefits, interest rates and the housing market. 	March 2015
Renewable Electricity Statistics	Previously, energy statistics to inform policy decisions and track progress against targets needed to be gathered from a wide range of sources largely on an ad-hoc basis. DETI committed to putting a resource in place to collate and report on energy statistics for NI with an initial focus on developments around Energy Efficiency.	<ul style="list-style-type: none"> • For the 12 month period January 2014 to December 2014, 19.0% of total electricity consumption in NI was generated from renewable sources located in NI. • Of all renewable electricity generated within NI over the 12 month period January 2014 to December 2014, 92.0% was generated from wind. • In December 2014, 26.7% of total electricity consumption in NI was generated from renewable sources located in NI. 	March 2015 September 2014

Title	Overview	Key Findings	Published
High Growth Firms: Update Bulletin 4	The fourth update bulletin emerging from the work on High Growth Firms examines age differences between High Growth and non-High Growth businesses for firms employing 10 or more and for those employing between 1 and 9 staff for each period between 2006-09 and 2011-14.	<ul style="list-style-type: none"> In 2011/14, high growth rates for businesses employing less than 10 were greater for younger businesses with 38% of micro businesses experiencing high growth. This is double the rate for those aged 20 or over. In 2011-14, high growth rates for businesses employing 10 or more were greater for younger businesses with 28% of micro businesses experiencing high growth. This is over three times the rate for those aged 20 and over. Younger businesses are more vital / dynamic / growth-oriented compared to older businesses although the larger pool of older businesses provides more High Growth businesses simply on the basis of the greater number of businesses. 	February 2015
High Growth Firms: Update Bulletin 3	The third update bulletin emerging from the work on High Growth Firms examines the business characteristics associated with employment growth or employment contraction in the thirteen four-year periods between 1998/01 and 2011/14 and the net effect of these competing business outcomes in each of the periods examined.	<ul style="list-style-type: none"> Between 1998/01 and 2006/09, the number of businesses experiencing job growth exceeded the number of businesses experiencing contraction of employment. Between 2007/10 and 2010/13, the number of businesses in each period experiencing contraction of employment was greater than the number of businesses experiencing job growth. The latest period (2011/14) saw a return to a positive balance between the number of businesses experiencing employment growth or contraction. 	December 2014

Title	Overview	Key Findings	Published
High Growth Firms: Update Bulletin 2	The second update bulletin emerging from the work on High Growth Firms used the latest 2014 data to provide High Growth figures on businesses between 2011 and 2014, setting these in context with the previously published data.	<ul style="list-style-type: none"> The latest data for 2011-14 indicates emerging signs of a strengthening employment contribution by High Growth businesses, particularly small (<10 staff) businesses. For the first time since 1998 there have been two consecutive periods experiencing continued increase in net employment growth between 2009-12 and 2011-14. Turnover growth however, and in contrast to employment growth, appears to be increasingly accounted for by non-High Growth businesses. 	November 2014
High Growth Firms: Update Bulletin 1	The first update bulletin emerging from the work on High Growth Firms investigated the impact of a wider range of 'plausible' High Growth rates (5%, 10%, 15%, 20%, 25%, and 30%) on both the number and characteristics of High Growth businesses identified between 1998 and 2013.	<ul style="list-style-type: none"> A growth rate of 20% was identified as an optimal measure of high growth being stretching yet achievable. The trends over time in the number of businesses identified as being high growth was reflective of the broader economic cycle. High Growth in businesses throughout the economy appears to be spread evenly therefore high growth for individual business/groups of businesses would be better informed through bespoke qualitative and quantitative approaches. 	September 2014
Innovation in Micro Businesses	The UK Innovation Survey reported that NI SMEs were less innovative than elsewhere in the UK over the past decade. However, no information was available on innovation levels in the NI micro business base, which makes up the majority of local firms. DETI therefore replicated the UK Innovation Survey for local micro businesses to develop data in this area.	<ul style="list-style-type: none"> Micro businesses reported significant levels of innovation. The nature of innovation amongst micro businesses is likely to be qualitatively different to that of SMEs or larger businesses. The approach of micro businesses to innovation and their concerns around the costs and benefits of innovation probably reflects the level of resources (financial and people) available to them. 	September 2014

Title	Overview	Key Findings	Published
Characteristics of High Growth Businesses	Utilising information from NISRA business surveys, this research assessed how many growth firms existed in NI and identified their characteristics. It was the first in a series of projects focusing on high growth companies.	<ul style="list-style-type: none"> From 1998-2001 and 2010-2013 the number of High Growth businesses broadly increased during the period of economic growth before contracting in line with the economy as a whole. For businesses employing 10 or more, in the period 2010 – 2013 1% of businesses accounted for 30% of employment growth. The disproportionate contribution of all High Growth businesses to employment growth is underlined by the fact that effectively 20% of all businesses accounted for the 53.2% of business employment growth. 	June 2014
Measuring Northern Ireland's Exports	The NI Economic Strategy prioritises export-led economic growth, which places an emphasis on ensuring appropriate information is available to measure progress. DETI has worked to develop an 'Exports Monitor', to better utilise existing data sources of exports across the local economy.	<ul style="list-style-type: none"> Two methods were considered to produce an aggregate measure of NI exports: MSES survey based approach or HMRC RTS administrative based approach. The option to use the MSES survey was selected as this route allows exports to be measured along with external sales to GB. The potential improvements to coverage via the new ABI-based measure of exports enhance the strengths of this approach. 	March 2014
SFA Evaluation 2004-11	Selective Financial Assistance (SFA) was last evaluated in 2008, covering expenditure during 1998-2004. DETI commissioned SQW Ltd and Aston University to produce an up-to-date evaluation covering SFA over during 2004-11. This work combined a traditional 'Green Book' evaluation with advanced econometric techniques to fully measure the net impact of SFA.	<ul style="list-style-type: none"> Significant firm-level and economy-wide impacts were delivered by SFA during 2004 to 2011 for firms of all sizes, from small to large. Against actual spend of £275million, the GVA impact was estimated at £1.5billion – equivalent to a return on investment of 5.4 to 1. SFA directly led to over 10,000 new jobs being created and more than 7,500 jobs safeguarded. 	July 2013

Title	Overview	Key Findings	Published
A Survey of NI's Third Sector	The DETI and DSD Ministers committed to measuring the overall size of the Third Sector in Northern Ireland and assessing its potential for further growth. PricewaterhouseCoopers were commissioned to carry out a survey of the Third Sector and produce recommendations on how to grow the sector.	<ul style="list-style-type: none"> • There are estimated to be over 3,800 third sector organisations in NI. • Almost 30,000 people are employed in the local third sector, accounting for 4% of total NI employment. • Third sector organisations turnover more than £1.2billion, with GVA of around £570million. This contributes 2% of total NI GVA. 	May 2013
Cost of Injuries and Ill-health to NI Economy	The Health and Safety Executive (HSE) in GB produced estimates of the cost of injuries and ill-health to the economy, which did not include NI. HSENI asked DETI to replicate the GB analysis and produce estimates for the cost to the NI economy.	<ul style="list-style-type: none"> • The cost of workplace injuries and ill-health to the NI economy was around £285million each year during 2008/09 to 2010/11. • At almost 1% of GVA, costs of workplace injuries and ill-health are significant but are also slightly below the impact for the UK as a whole. • NI costs accounted for 2.1% of total UK costs in 2010/11, lower than what would be expected given our employment share of 2.7%. 	March 2013
Financial Capability 2012	The Programme for Government 2011-15 committed to develop and implement a Financial Capability Strategy to address issues and challenges facing consumers. DETI supported this by developing a detailed evidence base on financial capability in Northern Ireland during 2012.	<ul style="list-style-type: none"> • The majority of people said that they were currently getting by alright or managing very or quite well with around 10% saying they were not managing well or experiencing difficulties. • Almost four in ten said that they did not have any savings or investments set aside for any emergency. • The financial issues people reported most frequently keeping a personal eye on were changes in state pension, benefits and tax credits (41%), changes in interest rates (39%) and changes in the housing market (34%). 	March 2013

Title	Overview	Key Findings	Published
SFA Data Linkage Study Update	<p>This report is a follow up to the initial data linkage study carried out in December 2012. At that time the necessary business survey data relating to firms in receipt of SFA from 2010/11 was unavailable. This report therefore completes the data linkage study for the Invest NI corporate period 2008/09 to 2010/11.</p>	<ul style="list-style-type: none"> • Businesses in receipt of an offer of SFA tended to be larger than non assisted businesses but with a similar age profile. • The manufacturing sector received a higher proportion of SFA offers compared to the service sector relative to the sectoral mix within the general business population. • Businesses in receipt of an offer of SFA had higher overall employment costs and employment per head costs but also had higher reported GVA and GVA per head relative to those businesses not in receipt of an SFA offer. 	June 2013
Invest NI SFA Longitudinal Analysis	<p>This report, conducted by Mark Hart and Karen Bonner, is a follow up to the SFA Data Linkage Analysis. Its purpose was to track the longitudinal data of a group of firms in receipt of SFA from Invest NI, in order to undertake an analysis of their performance over the 2007/08- 2009/10 period, and compare it to a non-assisted group.</p>	<ul style="list-style-type: none"> • Analysis of three years of data for 147 firms in receipt of SFA was carried out compared to a non-assisted group of 4,080 firms. • The results revealed that previously SFA assisted firms were larger, had higher GVA and higher employment costs than both newly assisted and non-assisted firms. • Subsequent growth rates indicated that those receiving previous assistance had the highest turnover per employee and GVA per employee growth rates over the entire period whilst new assists had the biggest increase in employment. 	December 2012
SFA Data Linkage Study	<p>The Invest NI administrative offers database is held separate from NISRA business survey data on firm performance. DETI committed to linking together these datasets to better understand the performance of companies that receive SFA offers. Aston Business School were commissioned to provide external commentary on the work conducted.</p>	<ul style="list-style-type: none"> • The period 2008/09 to 2010/11 witnessed a shift to the promotion of new jobs from safeguarding jobs. • The average value of SFA offered to externally owned businesses was substantially higher than the average value offered to locally owned businesses. • Businesses in receipt of SFA, compared to those not in receipts of SFA, typically had: a larger number of employees, more likely to be externally owned and to have achieved a higher value of turnover/sales and exports. 	December 2012

Title	Overview	Key Findings	Published
Developing an Open Innovation Centre	<p>Previous DETI research identified the importance of a professional secretariat to manage collaboration on innovation activities. The NI Economic Strategy subsequently committed to assessing how the Science Park could evolve into an Open Innovation Centre. Academics from University of Warwick and Queens University Belfast were commissioned to assess the benefits of an Open Innovation Centre and what activities this might carry out.</p>	<ul style="list-style-type: none"> • Open innovation can have significant benefits on company performance and productivity by driving increased exports. • NI has the poorest performance at open innovation of all UK regions, mainly due to performance of smaller firms and services sectors. • An NI Open Innovation Centre could act as an 'honest and independent broker' to champion open innovation to local companies. 	November 2012
Jobs Impact of the Tourism Action Plan	<p>The draft Tourism Strategy, and subsequent draft Action Plan, outlined a target to support 10,000 extra jobs in tourism by 2020. RSM McClure Watters and Oxford Economics were commissioned to assess the jobs impact that the measures outlined in the draft Tourism Action Plan could potentially have.</p>	<ul style="list-style-type: none"> • This research has been completed and is being used for internal purposes. 	N/A

ANNEX B: OTHER RELATED RESEARCH 2012-15

Links to the published reports can be found by clicking on the title heading.

Title	Overview	Key Findings	Published
Life & Health Sciences Foresight Report (Matrix)	If Northern Ireland is to provide world-leading standards of healthcare to its citizens whilst creating strong, sustainable economic outputs the sector must be understood and delineated accurately and in detail. This report aims to enhance understanding so that a clear and concerted strategy may be developed to serve the needs of patients dovetailed to Northern Ireland's future economic growth.	<ul style="list-style-type: none">• NI sectoral strengths include drugs, devices & diagnostic development, clinical trials, connected health & health analytics.• The development of NI's Life & Health Sciences sector requires a focused approach that leverages existing strengths while also remaining open to opportunities emerging from outside of NI.• NI must continue to build on strengths in oncology, respiratory, cardiology, diabetes and vision/ ophthalmology and address emerging challenges by employing enabling capabilities in: big data; data analytics; clinical trials; precision medicine and diagnostics.	February 2015
Global Entrepreneurship Monitor (Invest NI)	The Global Entrepreneurship Monitor (GEM) is an international survey involving 70 countries in 2013 which seeks to provide information on the entrepreneurial landscape within each country. Information on NI is included as part of the wider UK report.	<ul style="list-style-type: none">• The rate of total early-stage entrepreneurship (TEA) in Northern Ireland for 2013 was 5.1%, down from 7.1% in 2012.• The TEA rate of young adults aged 18 to 29 fell in 2013. However, the TEA rate among this age group has generally risen in Northern Ireland from 4.1% in 2002 to 4.9% in 2013 (UK: 4.2% to 6.4%).• Attitudes among the non-entrepreneurial population are still dampened compared to the pre-recession period.	October 2014

Title	Overview	Key Findings	Published
Harnessing the Power of Social Innovation to Drive the Northern Ireland Economy (Matrix)	<p>This report proposes a definition for social innovation; the need for a framework to measure social value; analyses the current capability within Northern Ireland and identifies key barriers and opportunities for harnessing social innovation to delivering social and economic benefit.</p>	<ul style="list-style-type: none"> • Social innovations are new solutions that simultaneously meet a social need and lead to new or improved capabilities and relationships and better use of assets and resources. • NI is well placed to take advantage of developing new solutions to tackle social issues and harness capability within the sector to increase employment and exportable services and products across NI. • A number of barriers have been identified on the difficulties faced by those within the Social innovation arena including: the prevalence of a "risk averse" culture; limited funding; high levels of bureaucracy; and the wider economic environment. 	<p>September 2014</p>
The Exploitation of Intellectual Capital by SMEs in Northern Ireland (Matrix)	<p>This report gives an insight into the level of awareness amongst Northern Irish science and technology-based SMEs businesses of their intellectual capital and outlines processes that may be employed to drive and support economic growth by exploiting intellectual capital and local innovation.</p>	<ul style="list-style-type: none"> • The majority of SMEs understand the generality of intellectual capital, however, not all understand how and what tools would be best to capture, manage and ultimately improve the exploitation of their intellectual capital. • There was a perception among some SMEs that collaboration with larger companies was more beneficial to the latter, with risks to the former in the possible loss of human capital, reputation and proprietary information. • In other regions around the world, led in part by Germany, SMEs are starting to use Intellectual Capital Statements to provide readily accessible IC information. Such statements can be used to aid internal business decisions and for banks and investor decision-making. 	<p>February 2014</p>

Title	Overview	Key Findings	Published
Competitiveness Index for NI (EAG)	The EAG commissioned Cambridge Econometrics (CE), in collaboration with SQW Ltd (SQW), to create a comprehensive competitiveness index to measure the economic performance of the Northern Ireland economy in both absolute and relative terms with competitor economies (regional and/or national).	<ul style="list-style-type: none"> Northern Ireland was ranked 42nd out of the 145 countries included in the analysis. Northern Ireland's highest pillar score (and also highest overall rank) was in Health & Primary Education. Northern Ireland also scored higher than its overall ranking of 42nd in Higher Education & Training, Goods Market Efficiency, Innovation, Technological Readiness, Infrastructure and Business Sophistication. 	June 2013
Review of Access to Finance for NI Businesses (EAG)	In the aftermath of the recession the issue of access to credit, particularly for SMEs, became a major policy area for debate. Access to Finance was extensively raised by the business community and their representative bodies concerned that banks were not responding to the finance requirements of business. Following discussions with the DETI Minister, the EAG decided to undertake a review of Access to Finance for businesses within Northern Ireland as part of its work programme for 2012/13.	<ul style="list-style-type: none"> The combined impact of declining domestic demand, increasing input costs, and cost of servicing existing debt was putting considerable strain on SMEs. There was frustration within the local business community over what is perceived by many to be an unwillingness of banks to lend, or to lend at reasonable rates. Demand for bank loan finance in NI in 2012 was relatively low at 8% of SMEs. The bank loan success rate in 2012 was 66%, broadly in line with 2010. Demand and success rates were similar to recent surveys in the UK and RoI. 	March 2013
GB Bio Energy Report (Invest NI)	Recognising the growth potential at various levels of the bioenergy supply chain, Invest Northern Ireland appointed Kappa Consulting to provide a brief overview of the key drivers, developments, events and sources of information relating to the UK Bioenergy (biogas and biomass) sector.	<ul style="list-style-type: none"> Bioenergy projects are relatively capital intensive, and will generally require funding from external finance – a combination of government incentives, public sector funding and private sector finance. If the bioenergy and renewable targets are to be achieved, the UK supply chain needs to expand across the full suite of technologies and services – from equipment through to the support industries involved in commissioning and maintaining equipment. 	March 2013

Title	Overview	Key Findings	Published
Sustainable Energy Report (Matrix)	DETI and MATRIX identified the commercial opportunities associated with sustainable energy technology markets as substantial in scope and likely to grow significantly in the coming decades, as worldwide demand for lower-carbon technologies increases. This research aimed to build on the existing knowledge base and extrapolate forward to identify attractive global market opportunities that could be realised by exploiting Northern Ireland's science, research and technology capabilities in this area.	<ul style="list-style-type: none"> No individual region has to date established a leadership position in this niche sector and NI has the opportunity to lead, exploiting first mover advantage. NI has a unique position in terms of the scale of its islanded electricity system: small enough to demonstrate sustainable energy solutions as commercially viable, but large enough to be relevant and credible to global markets. The development of an Intelligent Energy System in NI could not only provide significant export opportunities for businesses in Northern Ireland, but could simultaneously improve the sustainability, security and affordability of the regional energy supply. 	February 2013
The Economic Potential of Developing the Cloud Computing Industry in NI (Invest NI)	Invest Northern Ireland appointed Oxford Economics to undertake research into the potential of the cloud computing market to generate additional employment and economic growth in a high growth scenario based on the current Oxford Economics regional model baseline.	<ul style="list-style-type: none"> Under a high growth scenario over 10,200 additional jobs would be created in the NI software and IT services industry (KE definition) resulting in total employment of 20,400 by 2020. This level of employment growth would represent approximately 34% of the knowledge economy job creation targeted under the NISP CONNECT targets between now and 2020. Direct GVA in the NI software and IT services industry (KE definition) would also reach £1.5bn by 2020, compared to a baseline projection of £0.8bn. 	2012

Title	Overview	Key Findings	Published
Construction Related Opportunities in the Health and Education Sectors in GB (Invest NI)	<p>This report was commissioned by Invest Northern Ireland to provide client companies with an up-to-date understanding of recent developments within the health and education sectors, including an overview of the main procurement routes and processes and the key contractors active within each sector.</p>	<ul style="list-style-type: none"> • Both the health and education sectors have been severely affected by the budget cuts announced by central government and the devolved administrations. • Conventional funding will be supplemented by PPP initiatives; this will be the key route for delivering investment in Scotland over the next 4 years. • The publication of the Comprehensive Spending Review and the subsequent publication of the devolved administration budgets at least provide clarity about the position over the next 4 years. 	February 2011
Digital Northern Ireland 2020 Report (Invest NI)	<p>The Digital Northern Ireland 2020 project was initiated following a consultation period. There was a consensus that to realise the full potential of the investments in digital infrastructure, there should be a proactive leadership approach to its exploitation. This short study identifies a range of opportunities and proposals on how to rapidly move forward with creating momentum for the exploitation of Northern Ireland's Digital Platform.</p>	<ul style="list-style-type: none"> • Support the progression of a set of strategic projects. • Support the establishment of a set of Collaborative Business Clusters. • Assist in targeting FDI in the ICT/digital technology area, including the creation of a Design and Operations capability. 	2009/2010



**For further information on this report
please contact:**

Thomas Byrne
thomas.byrne@detini.gov.uk

Nicola Laverty
nicola.laverty@detini.gov.uk

**To be added to the distribution list for updates
on DETI research projects please contact:**

Analytical Services Unit
Dept of Enterprise, Trade and Investment
Netherleigh
Massey Avenue
Belfast, BT4 2JP
Email: asu@detini.gov.uk