

SYMPOSIUM: RESEARCH CAPACITY AND POLICY MAKING 2010/2011

Building Research Capacity in the Social Sciences – Alternatives Approaches

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1. INTRODUCTION

In contrast to previous decades, the past decade has seen major investments by the Irish government in the national research capacity. As part of this investment, there has been a significant investment in the social sciences with the creation of major institutes in the universities and the rapid expansion of numbers of students supported in PhD programmes. This paper reviews the recent developments and contrasts them with the only other significant investment in the social sciences research made over the past half century, namely, through the creation of the Economic and Social Research Institute [ESRI]. Drawing on the different experiences, the paper suggests key issues that should be addressed in reviewing the development of these recent investments and on what might be appropriate future strategies.

Section 2 sketches the background to the paper by describing the Irish state's approach to investment in research capacity in the period prior to the mid-1990s followed by an overview of the increased focus on investment in research in recent years. Section 3 provides a simple framework for discussing possible approaches to supporting the building of capacity in the social sciences. This framework distinguishes institution building, capacity building and generation of PhD graduates. Using this framework, Section 4 looks at the approaches to increased research support for the social sciences in the past decade, focusing specifically on the establishment of Institutes in the Higher Education Institutions [HEIs] under the Programme for Research in Third Level Institutions [PRTLTI], and the PhD funding programmes under the PRTLTI and the Irish Research Council for the Humanities and the Social Sciences [IRCHSS].² It also looks at the earlier approach to investment in social science research through the establishment of ESRI.³ Section 5 explores what can be learnt from the two approaches that would help guide strategy in the future.

¹ We are indebted to the late Denis Conniffe for early discussions on some of the content of this paper and for suggesting to the Council that a symposium on this issue is timely. We are grateful to Bernadette Ryan, Sarah Burns and Cormac O'Sullivan for assistance with the preparation of data drawn from ESRI records, Eucharua Meehan and Malcolm Byrne [HEA], Leonora Harty [IRCHSS] and Marcus Breathnach [Forfás] for data provided. The usual disclaimers apply.

² Some other areas where social science research is funded are not considered here. Specifically, the HRB is not included in this review as its significant move to fund research more relevant to the social sciences is only getting underway in the very recent past. Also excluded are research funds in relation to food and agriculture. Arguably this is the area of research that has had by far the highest level of funding in Ireland over the past five decades.

³ The Statistical and Social Inquiry Society had a direct role in the creation of the ESRI, and hence its direction. The background details, drawn from Mary Daly 'The Spirit of Earnest Inquiry – The Statistical and Social Inquiry Society of Ireland, 1847-1997' The Statistical and Social Inquiry Society of Ireland [1997] on the history of the Society are set out in Appendix 1.

2. BACKGROUND

A key feature of Irish policy making until the early 1990s was the extent to which there was little connectedness between investment in research and development [R&D], either public or private, and economic growth. This disconnectedness was also reflected in the fact that data in relation to R&D and innovation were not integrated into the National Statistical Framework. Data collected on R&D, under the auspices of the OECD, did not feature in policy discussions and the implication of Ireland being relatively underinvested in both HERD [Higher Education R&D] and BERD [Business Expenditure in R&D] did not feature strongly in policy discussions until very recent times. The budgets for R&D moved between government departments and agencies, and were not a priority in the 1970s or 1980s. From the perspective of HERD, interest lay in ensuring that Ireland drew down as much funding as possible from the various EU Framework programmes.⁴ The BERD perspective was complicated by the fact that the low corporate tax rate reduced the incentive for investment in R&D by multinational enterprises [who undertook research in the high-tax locations] and that the small scale of Irish-owned enterprises was such that they were not in a position for the most part to engage in research locally.⁵

The major exception in this area was agriculture and, more latterly, food. From the time that the Agricultural Institute was established in 1958 there was significant state funding for research related to increasing productivity in agriculture, and more recently towards developing food products.⁶ Not surprisingly then, food companies in Ireland have been to the fore of indigenous enterprises in investing in research and development and innovation activities generally.

Ireland was not unique in its approach to R&D, but the scale of underinvestment in HERD and BERD came into Irish policy focus in the 1990s as the key conclusions of endogenous growth theory were mainstreamed into policy across all OECD countries and particularly in the European Union. This literature highlighted the importance of R&D in maintaining growth in developed economies and identified a role for the state in supporting R&D.⁷ It also identified a role for the state in ensuring that a country had a well functioning *System of Innovation*, so that the benefits from investment in R&D would accrue locally.⁸

At a policy level, Ireland seems to have been led to engage in investment in this area by four developments:

1. Greater levels of EU funding were available in this area – in effect, Ireland wanted to ensure that it could access this growing revenue source within the EU.
2. State Aid for R&D was allowed for the most developed EU regions, where training or capital grants were not allowed. Since Ireland was soon to be constrained in negotiating capital and training grants with MNEs, it needed to have available instruments which were allowed under state aid rules, and these were primarily in relation to R&D.
3. Continued investment by high tech manufacturing, which had been promoted since the 1960s, required that Ireland have more R&D skilled capacity to support this type of industry - in effect for the IDA to continue to win projects in these sectors, it needed to demonstrate that there was the domestic capacity to undertake research and to educate skilled R&D personnel.
4. Increased rates of globalisation and higher domestic costs meant that Ireland could not compete for low skilled jobs in the traded sectors – and this became the origin of expressions such as ‘Ireland needs to move up the value chain’, so that activities were genuinely high tech and not confined to low-tech activities in high-tech sectors.

⁴ Throughout the 1980s Ireland earned on average around four times its <<juste retour>> on EU projects, reflecting both the determination of its researchers and the virtual absence of funding domestically to support research.

⁵ The recent changes in the tax treatment of R&D – new credits – have helped rebalance this incentive.

⁶ That funding extended to agricultural economics and rural sociology in the 1960s.

⁷ This understanding grew out of the endogenous growth literature [e.g., Romer P. M. (1990), “Endogenous technological change”, *Journal of Political Economy*, vol. 98, pp. 71–101, Aghion, P. and P. Howitt (1998) *Endogenous Growth Theory*, Cambridge, Massachusetts: The MIT Press, etc] that developed in the 1980s.

⁸ This literature emanated from the Nordic countries, with Denmark and Sweden to the fore in establishing what such a system would look like. See Lundvall, B.-Å., (ed.), *National Systems of Innovation: Towards a Theory of Innovation and Interactive Learning*, London: Pinter Publishers, 1992. This work drew on earlier work by Friedrich List's on “The National System of Political Economy” published in 1841. See also Nelson, Richard R., editor [1993] *National Innovation Systems: A Comparative Analysis*. Oxford, UK: Oxford University Press.

In terms of policy, key documents were the NESC study on Innovation Systems [1992],⁹ the Culliton Report [1992]¹⁰ and the explicit inclusion of science policy with industrial policy in the creation of Forfás in 1993.¹¹ These were reinforced by various documents produced in the mid 1990s and in particular the report of the Irish Council for Science, Technology and Innovation.¹² By the end of the 1990s Ireland had set itself the target of moving up the OECD ladder in relation to science, technology and innovation [STI] and this was reflected in a series of new programmes:

- The establishment of the PRTLTI programme which created infrastructure in higher education institutions [HEIs] linked to each institution's individual strategy¹³ - PRTLTI has invested over €850m to date.
- The establishment of Science Foundation Ireland [SFI] modelled on the National Science Foundation [NSF] in the USA, designed to build up centres of excellence in the two key areas of economic significance, namely, ICT and Biotechnology – SFI invested €1.4bn in the period 2000-2009.
- The establishment of the Irish Research Council for the Humanities and Social Sciences [IRCHSS] and the Irish Research Council for Science, Engineering and Technology [IRCSET] in 2002.
- The significant increase in funding for health research through the Health Research Board, and also new and additional funding for research in energy, environment, marine, etc.

The ambitious programme of development of Irish research was further strengthened in the mid 2000s with the creation of the Strategy for Science Technology and Innovation 2006-2013 [SSTI] which envisaged further funding into Ireland's research over the coming seven years. A budget of over €6bn was set for SSTI in the National Development Plan 2007/2013 in addition to the €1.5 bn in the HE budget for research and €0.6 bn through the IDA. The breakdown of the planned research funding is set out in Table 1.

Table 1 Funding Provided for RTDI Under NDP 2007-2013 [€m]

World Class Research STI	3,462
Enterprise STI [EI]	1,292
Agri-Food	641
Health Research	301
Energy Research	149
Marine Research	141
Environmental Research	93
Geo-science	33
Total – Direct	6,112
Complemented by H Ed	1,500
Complemented by IDA Spend	600
Total	8,200

Source: Department of Enterprise, Trade and Innovation November 2010

⁹ See Mjoset, L. 1992. 'The Irish Economy in a Comparative Institutional Perspective', Dublin, National Economic and Social Council.

¹⁰ Culliton, J., Report of the Industrial Policy Review Group - A Time for Change: Industrial Policy for the 1990s; Stationery Office; Dublin; 1992.

¹¹ Prior to the creation of Forfás, policy in relation to R&D was based in EOLAS [having moved there from the National Board for Science and Technology in the late 1980s] while industrial policy was driven mainly by the IDA.

¹² See O'Foglu, M "Science, Engineering and Technology Research Funding Policy in Ireland 1995-2008: A Policy Document Analysis" PhD thesis, University of Sheffield, 2010, for a careful discussion of policy development.

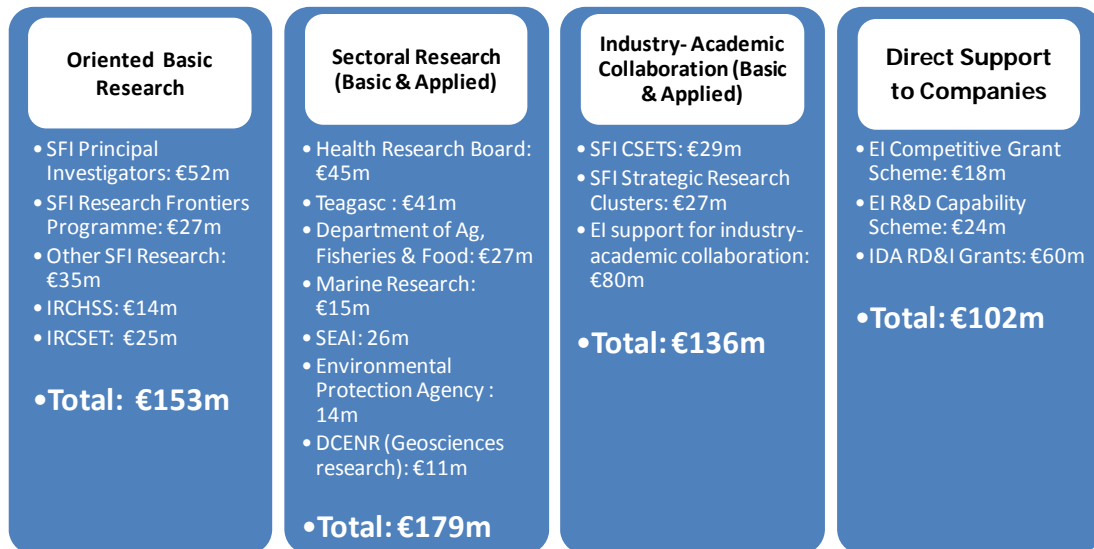
¹³ Although the programme was national, individual institutional strategies drove the determination of focus.

Chart 1 provides a picture of where total funding for Research, Technological Development and Innovation in Ireland was spent in 2009, the latest year for which complete data in this form are publicly available. It shows that over €150m went to oriented basic research, with the majority going to science and technology through SFI. An even larger sum (almost €180m) was devoted to particular sectors – health, agriculture/food, marine, energy, environment and geosciences. Funding to support HEI-industry collaborative research came to €136m while companies directly received over €100m for their own R&D.¹⁴ In the same year the HEA provided €231m for research [the portion of the block grant attributed to research] and some €85m to support research infrastructure – this was a comparatively low figure for the PRTLTI reflecting the cycles in that programme.

This scale of expenditure is evident in the very significant improvement in Ireland’s relative position in terms of HERD expenditure relative to the rest of the EU 27 and the OECD over the period 1998-2008. This is shown in Chart 2 which is based on data collected from the Forfás Higher Education R&D Survey in 2008. Finally Chart 3 indicates that there has been a very significant increase in output as measured by citations of Irish research in the period since the middle 1980s, and undoubtedly the increased investment in the period since 2000 has contributed to this.¹⁵

Chart 1: Actual Expenditure on Research, Technological Development and Innovation in 2009

State Expenditure on RTDI in 2009 - €910m



Infrastructure (Competitive): **PRTLTI €85m; Res Fac Enhancement Sch. €4m**

HEA University Block Grant (Research Element Imputed) **€231m**

The Technological Sector Research Fund **€6m** (IoTs)

Source: Derived from The Science Budget 2008/2009; Forfás

¹⁴ Enterprises were also eligible for R&D tax credits introduced in the early 2000s and have been developed since.

¹⁵ Other factors may be the greater recognition by Irish academics that citations matters for promotions and greater effectiveness on the part of Irish universities in ensuring that the publications of their researchers were being picked up by Thompson Reuters.

Chart 2: HERD 1998-2008 Relative to GNP/GDP, Ireland, EU 27 and OECD [Forfás]

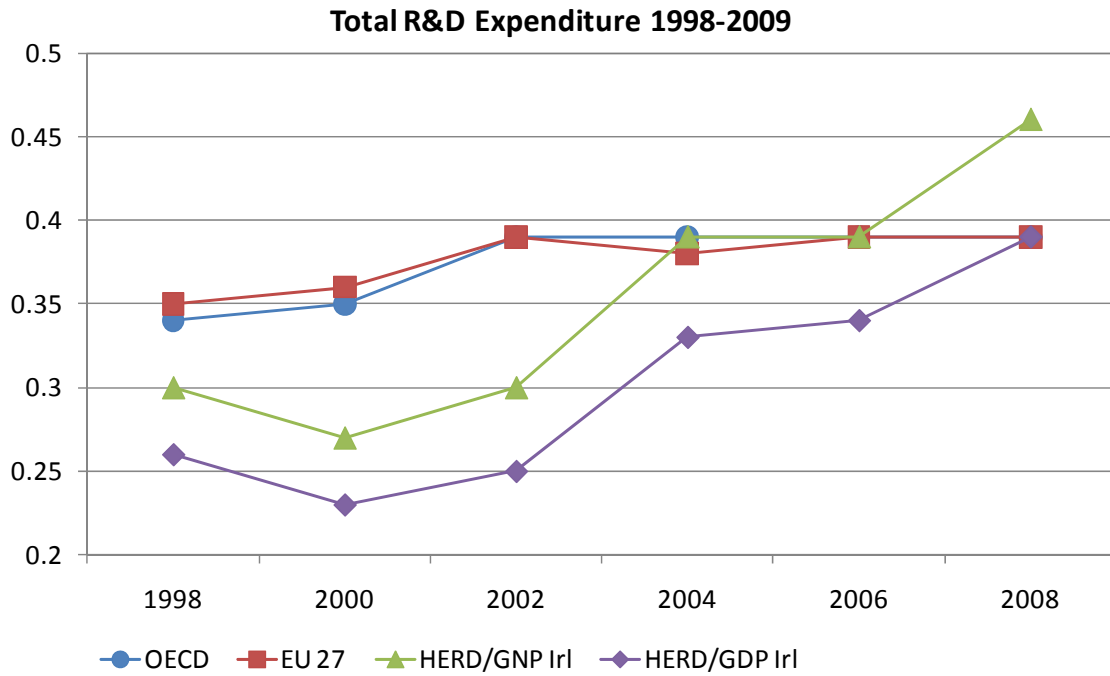
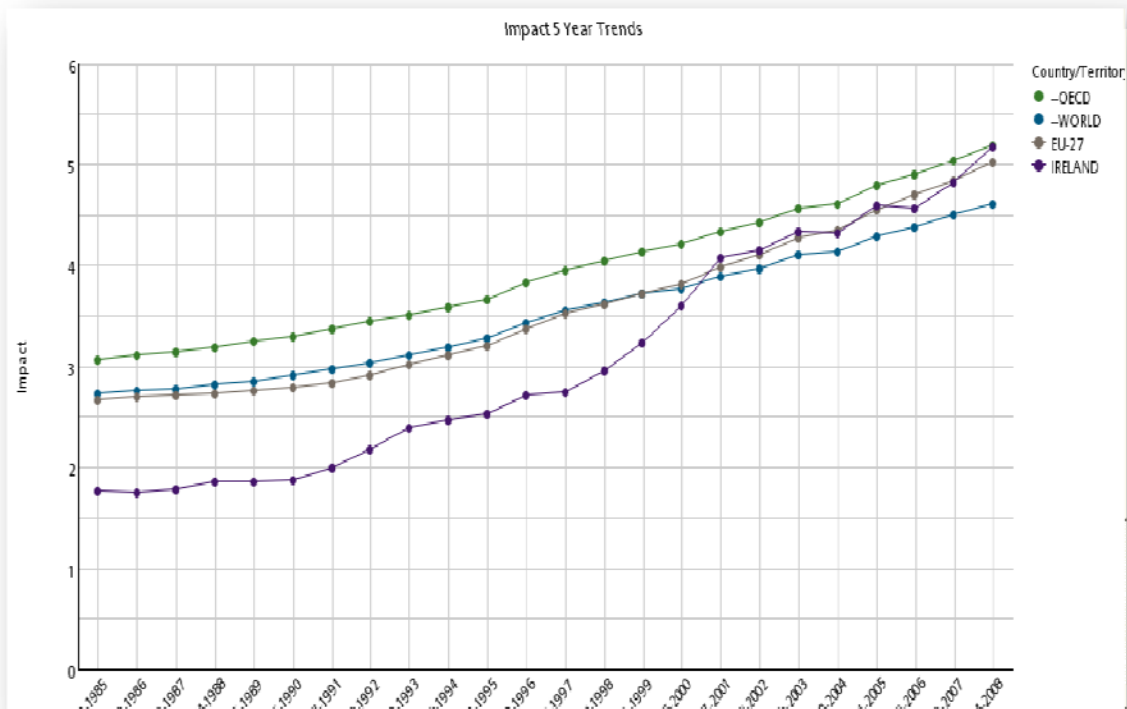


Chart 3: Impact 5 year Trends in Citations [Thomson Reuters 2010]



It is against this background that this paper looks at the investment in research in the social sciences, and especially at what might be learnt from the experience of the state's investment in social science research. It is clear from Chart 2 that the scale of direct investment through IRCHSS is relatively small in the context of the total spending on R&D in the HE sector in 2009. However, the social sciences were eligible to benefit from investment by the HEA through PRTLTI and other agencies, e.g., HRB. Before looking at the differences in approach, we consider how we might look at the different possible supports that can be introduced to build capacity in the social sciences.

3. STRATEGIES FOR BUILDING SOCIAL SCIENCE RESEARCH CAPACITY

Because of Ireland's late start in terms of building up research across all areas, significant components of the expenditures in the past decade have been seen as capacity building exercises. Specifically, the funding under PRTLTI was targeted at infrastructure [physical and human capital], and a significant part of the funding under IRCHSS was to support PhD and Post-doctoral researchers.

In relation to looking at how Ireland has built research capacity in the social sciences, we believe that it is helpful to look at a framework that considers different approaches to capacity building which would apply to any country attempting to increase its research capacity. This framework reflects decisions in relation to institutional structures, capacity building and PhD developments. It is used in Section 4 to consider exactly what Ireland has done in building capacity in the social sciences. The precise approach that any country would adopt depends on the desired objectives in relation to the capacity to be built and the expected long-term evolution of that capacity. This issue is discussed further below.

3.1 Institutional Structures

Assuming for the moment that there is clarity in relation to objectives, then in regard to institutional structures, we suggest that a country could consider one or more of the following:

- S 1. Create one or more national institutes to conduct research in the social sciences – along the lines of the Max Planck Institutes in Germany.
- S 2. Provide funding for the establishment of specifically focused research institutes and allow HEIs to compete for these – as has been the case in many areas in the US and UK.
- S 3. Invite HEIs to make proposals for developments that they consider would help to meet the defined national objectives.
- S 4. Establish a research funding agency to provide increased funding for competitive programme- and project-based research.

Options S1 and S2 are essentially top-down, whereas Option S3 is a bottom up institutional approach and Option S4 is a bottom up researcher/research group approach. In terms of acceleration, Options S1 and S2 could be put in place in a very short time if the objectives set were clear. Option S3 would be slower and raises coordination and possible 'academic turf' issues. This may be complicated or simplified by HEIs combining to make submissions, and its effectiveness may depend on the extent to which the combinations are underpinned by strong academic synergies. Option S4 can be implemented quickly based on models available in most OECD countries.

3.2 Human Capital Capacity Building

In relation to increasing the human capital required to enhance research capability, we suggest that the relevant options are to

- HC 1. Increase the research time available from the existing stock of research staff – say by reducing teaching/administration loads, providing sabbaticals and/or increasing hours in research.¹⁶
- HC 2. Increase the number of researchers in the system in a general way [increase departmental staff size].

¹⁶ Irish universities have been unusual in the extent to which sabbatical policies have been underdeveloped.

- HC 3. Increase the number of researchers in the system in a targeted way [fill senior posts with international quality researchers in very specific areas – e.g., SFI Principal Investigators].
- HC 4. Increase the number of post-doc positions in order to enhance the long-term capacity of the research body – as done say via the Marie Curie Awards
- HC 5. Increase the number of PhD graduates.

Options HC 1 and HC 2 would probably have to be combined to generate a significant increase in research time, unless there was considerable over-capacity in some area.¹⁷ In the absence of doing so, increased research time would likely come from reduced teaching effort if loads are not reduced. Option HC 3 would be likely to be most successful where there is a context that would attract a world-class researcher, and where that researcher is likely to engage very actively with the researchers in that area in Ireland. The value of Option HC 4 would depend on the existence of a critical mass of researchers in an area, and the availability of PhD graduates of suitable quality.¹⁸ Option HC 5 can be delivered in a number of ways, and to consider these in detail we look at them separately.

3.3 Increasing PhD Graduate Numbers

The decision to increase the number of PhDs is clearly a long term strategy to increase capacity. In general, we suggest that the options available to Ireland, as to any country, in relation to supporting growth in PhD numbers are:

- PD 1. Provide funding for PhD students to allow them to pursue PhD level research at any national HEI.
- PD 2. Provide funding for researchers that will allow them to support PhD level students while doing research [along the lines of research assistantships or teaching assistantships].
- PD 3. Provide funding to establish taught PhD courses in Ireland by way of a national programme [eg as the Dutch and the Scots have in economics] based at one or more institutions.
- PD 4. Provide funding for students to support their PhD level research at any institution at home or abroad.

Option PD 1 is entirely bottom up but could contain a top-down element if the funding mechanism set a standard for what is required in a PhD programme. Option PD 2 is a variant of the traditional PhD apprenticeship model which is more suited to some kinds of research areas than others. Compared with Option PD1 it has the general merit of the student having more choice in relation to what he/she is doing and being most centred on the student. Option PD 3 recognises that further course work is required as part of a PhD programme and provides for this systematically. This means that students are more likely to concentrate in groups but the extent and form of this depends on the use of technology – video-conferencing lectures, etc.¹⁹ Option PD 4 is a global bottom-up type model, where the creation of the research skills is not restricted to Ireland but clearly the criteria for receiving funding could reflect strategic values.

At this point, we return to the issue of the need for any country to clarify its objectives in relation to building research capacity before it begins this process. A clear objective is building excellence in that capacity. A second objective could be in relation to relevance to a country's national goals, whether these be cultural, social or economic. If there are two objectives, say excellence and relevance, how should they be balanced, should this balance differ by area - e.g., the arts and the sciences - and how should it be determined and implemented? Furthermore, in relation to PhDs, is the purpose to educate them for employment in academic/research posts or should the skill sets they acquire be relevant to other types of jobs that they might take up? Should the objective be to prepare post-graduates for employment primarily in Ireland or should the training be geared towards the international market? It is vital for government to determine *ab initio* what the appropriate relationship is between policy for higher education and research and for economic development, and for excellence compared with relevance.

¹⁷ In light of the deterioration in staff-student ratios over the 1990s, this is unlikely to be the case.

¹⁸ In the period prior to 1999 there were very few PhD graduates from Irish Universities in some of the social sciences and especially in economics.

¹⁹ Depending on the breadth of the PhD programmes there could be several running within one discipline. The HRB PhD Scholars Programme in Health Services Research is one such programme.

Finally, if government has well defined goals, it then needs to consider just what scale of research activity it needs to set in place in order to ensure balance and sustainability. What is that model and does it make sense in a particular national context? Turning on and off taps in relation to research funding generates uncertainty and ultimately reputational damage. A slow steady pace is preferable to a start/stop regime, and one where the system is relatively balanced is preferable to one of extreme imbalance. Furthermore, quality at this level is crucial – unless the research and the training are of high quality the doubling of inputs is of little value.

In the following section we use this framework to explore capacity building in the social sciences in Ireland.

4. INVESTMENT IN SOCIAL SCIENCE RESEARCH CAPACITY IN IRELAND

In the past decade, there has been a concerted effort to increase research capacity in the social sciences in Ireland. The key sources of funding to support social science research came in the form of funds for PRTLTI programmes and the development of IRCHSS. We look at these programmes along side an earlier programme dating back to the 1960s when the government established the ESRI.

3.4 Institutional Structures

We identified in Section 3.1 four different approaches to building Institutional structures:

- S 1. Create one or more national institutes to conduct research in the social sciences
- S 2. Provide funding for the establishment of specifically focused research institutes and allow HEIs to compete for these
- S 3. Invite HEIs to make proposals for developments that they consider would help to meet the defined national objectives
- S 4. Establish a research funding agency to provide increased funding for competitive programme and project-based research

To establish a new institution [Option S 1] is challenging, especially when its purpose is designed to address a deficit in local skill sets. This was the approach adopted in the 1960s, when the government decided that it needed to establish greater capacity in economics and subsequently in other social science skills. The choice of this option reflected the focus that government sought [policy research] and the absence of skills and scale in the Irish universities at that time.

Roy Geary, the ESRI's first Director, was an exceptional scholar and had wide research experience and strong international connections. His stature and the strong backing of the key figures and the government, together with the internationally known Ford Foundation, strengthened the likely success of the Institute. The direct funding for the ESRI over the past five decades is set out in Table 2.

Table 2: Direct Government Support for Social Science Policy Research:
ESRI Grant-in-Aid (annual average per decade deflated to 2010 money values)

Period	€000
1964-69	787.08
1970-79	2,901.05
1980-89	2,801.69
1990-99	2,482.53
2000-09	3,187.80

After ramping up in the early years, the real annual average spend has remained at about €3m, with a dip to €2.5m in the 1990s.²⁰

²⁰ The Grant in Aid has reduced significantly since 2008 and is €2.7m in 2011.

When the decision was made to increase capacity in the late 1990s under the PRTLTI, the government used Option S 3, a bottom up approach, to the establishment of the Institutes based on proposals from Irish HEIs. These are set out in Table 3, which shows the funds in current prices that were linked to building research capacity under the first four rounds of PRTLTI. The figures in this table relate to non-capital expenditure only.

Over €18.6m was spent in the first three cycles on establishing six Institutes/centres across the HEI system, each with a particular focus: one social science institute [Geary], two spatial institutes [Urban Institute and NIRSA], one internationalisation institute [IIIS], one business-innovation centre [CISC] and one transport institute [TRIP]. The Geary Institute was alone in receiving explicit follow-up funding under PRTLTI [in Cycle 3] and funding for ISDDA in Cycle 4. Cycle 4 provided €18.2m for a major multi-institutional programme covering five universities, and a budget that was almost the same (in current terms) as the total funds that had been spent on the other institutes/centres in the first three cycles. This larger project was associated with a much more diffuse range of activities than the earlier projects.

There are three ways in which the approach to funding the ERI/ESRI differs from that for the PRTLTI institute/centres. The first relates to the speed of establishment – the funding came quickly under PRTLTI whereas the Institute grew at a slow steady pace over its first 10 years, incorporating sociology and social psychology in the late 1960s. Second, while the original ESRI funding was just for five years [under the Ford Foundation] there was a commitment from the government to continue the core funding. This core funding remained at a relatively high level up to the late 1980s, after which it fell as a share of total income. No such commitment is available to the PRTLTI institutes/centres which were well funded at the time the grants were awarded but without any clear long-term model in relation to future core funding. Unlike the ESRI, the PRTLTI institutes and centres are in a position to win funding within their institutions and perhaps that is the basis for long-term sustainability – no research institute can exist without core funding so that the ratio of ‘soft’ to ‘hard’ funding is balanced. Third, the ERI/ESRI had a clear mandate to undertake policy-related research from the start, and this mandate was reflected in the production of over 140 papers in its first eight years. The vast majority of these were ESRI publications, and they related directly to the Institute’s mandate to address the policy challenges of the day. However, relevance was not the sole criterion, and evidence of the excellence criterion, though not in the Institute’s mandate, is reflected in a range of publications in major international journals, especially in econometrics and statistical journals.²¹

By contrast, there would appear to have been essentially two dominant criteria in relation to the funding of PRTLTI institutions; firstly, that they were to be centres of excellence at an international level and secondly, that their development was in line with the host HEI’s development strategy. In the context of changes in Ireland in the past three years, the issue now arises as to whether in the future there should be some defined focus on national relevance in the research agendas of these institutes/centres.

In relation to Option S 4, it was decided, following widespread discussion, to create IRCHSS as the funding body for competitive research projects [including PhD studentships, post-docs, sabbaticals, and research projects] in both the Humanities and the Social Sciences. This had the benefit of creating an institution with reasonable scale and the potential for funding wider cross disciplinary projects. Its disadvantage was that the potential for developing funding calls particularly suited to the social sciences was reduced.

²¹ For example, *Econometrica*, *Journal of the American Statistical Association*, the *American Statistician*, *Biometrika*, *Review of the International Statistical Institute*, and the *Journal of the Royal Statistical Society (Series B)*, *The Economic Journal*, *Oxford Economic Papers*, *European Economic Review*, *Papers in Regional Science* and *Economic Record*. Other publications were in *Rural Sociology* and the *Journal of the Irish Medical Association*.

Table 3: Social Science Initiatives [Non-CAPITAL] funded under PRTL I Cycles 1 – 4

Programme for Research in Third Level Institutions – Cycle 4			
Programme	Institutions	Project Description	Award (€000)
Irish Social Science Platform (ISSP)	DCU, NUIG, NUIM, UCC, UL	An all-island programme of fundamental, applied, and comparative research and graduate training on Knowledge, Innovation, Society and Space.	€18,200
Irish Social Science Data Archive (ISSDA)	UCD	ISSDA makes machine-readable data from surveys and official statistics readily available to users in the academic, public and commercial sectors.	€750
Programme for Research in Third Level Institutions– Cycle 3			
Centre for Innovation and Structural Change (CISC)	NUIG, DCU, UCD	A research programme in a ‘new and emerging potential area’ in Innovation and Structural Change.	€1,954
Centre for Transport & Innovation in People	TCD, UCC	The establishment of a Centre for Transportation Research and Innovation.	€2,024
Institute for International Integration Studies (IIIS)	TCD, NUIM	Research on the global and regional dimensions of international economic, political and cultural integration.	€5,662
Programme for Research in Third Level Institutions– Cycle 2			
National Institute for Regional and Spatial Analysis	NUIM, DIT, GMIT, WIT, MIC	To facilitate the interdisciplinary and comparative study of the impact of global processes on regional and spatial development.	€1,531
The Urban Institute	UCD, TCD	To establish a centre of excellence in urban studies.	€3,022
Programme for Research in Third Level Institutions – Cycle 1			
The Geary Institute ²² (formerly the Institute for the Study of Social Change)	UCD, TCD	To bring together research programmes in the social sciences with a particular focus on the impact of political change in Irish-British relationships; EU relations and global change.	€4,432

²² The Geary Institute received funding under both Cycles 1 and 3. The total for the two programmes is listed here.

4.2 *Human Capital Capacity Building*

Having decided on an institutional form, the second issue that arises is how to build up research capacity within that structure. We consider four of the five options from Section 3.2, leaving for later discussion capacity building via PhD graduate programmes which we explore in 4.3 below.

- HC 1. Increase the research time available from the existing stock of research staff.
- HC 2. Increase the number of researchers in the system in a general way.
- HC 3. Increase the number of researchers in the system in a targeted way [fill senior posts with international quality researchers in very specific areas].
- HC 4. Increase the number of post-doc positions in order to enhance the long-term capacity of the research body.

Under the PRTLTI system, institutes used their funding in different ways, with particular focus on strategies HC 1 and HC 4. In relation to HC 1, for example, internal sabbaticals or reduced teaching loads were provided for academics to free them up for research time. This policy was supported also by funds made available through IRCHSS for sabbaticals. In relation to HC 4, funds for post-doc fellowships for social science PhDs became available for the first time in the Irish system and this drew in many foreign candidates in the early years and provided research opportunities for graduating PhDs in the later periods.

In relation to HC 3, visiting positions were established to draw in senior international researchers, though these typically did not have Principal Investigator roles as visits were typically short and control of funding did not rest with the visitor, i.e., the social science model was not like the SFI model.²³ This contrasted with the approach adopted by the ERI where Roy Geary attracted senior scholars from outside Ireland to the Institute; none of the early appointments were Irish.²⁴ This strategy was appropriate to the times as there were virtually no academics in Ireland with the requisite skills [See Appendix 1].²⁵ It is noteworthy that most of the senior researchers who came to the Institute stayed for a relatively short time (three years on average²⁶) and that the organisation was several years in operation before it attracted any significant number of researchers who went on to make their careers at the Institute.²⁷

4.3 *Increasing PhD Graduate Numbers*

As noted in Section 3.3, we identified four different approaches to developing a population of PhD graduates in the social sciences:

- PD 1. Provide funding for PhD students to allow them to pursue PhD level research at any national HEI.
- PD 2. Provide funding for researchers that will allow them to support PhD level students while doing research [along the lines of research assistantships or teaching assistantships].
- PD 3. Provide funding to establish taught PhD courses in Ireland by way of a national programme based at one or more institutions.
- PD 4. Provide funding for students to support their PhD level research at any institution at home or abroad.

The difference between Options PD 1 and PD 2 is that the former is a straight studentship whereas the latter links the student to a research programme – in effect they are paid a stipend for some activity they must perform. These two schemes are approximately those adopted by IRCHSS and PRTLTI respectively – quite a large portion of the funding under PRTLTI in Table 3 above provided funds to support graduate students.

²³ While some of the Principal Investigators were already based at Irish universities, the majority were headhunted internationally.

²⁴ The researchers primarily came from the UK and Germany. In Mary Daly's book on the history of the SSISI, she noted that the hiring of these foreign economists aroused hostile comment from Oliver J. Flanagan, TD and UCD economist John O'Donovan. The list of ESRI Research Alumni can be found on the ESRI Website at http://www.esri.ie/staff/research_alumni/

²⁵ The model of bringing in senior foreign scholars is reminiscent of what had occurred in 1940 at the time the Dublin Institute for Advanced Studies was created.

²⁶ The longest serving and most prolific early senior researchers was CEV Leser who spent six years at the Institute.

²⁷ The earliest such arrival was Terry Baker in 1965.

Table 4: Numbers of PhD Students funded by source of Funding²⁸

PRTLTI supported students	IRCHSS Scholarships	IRISH AID Scholarships	North-South Programme	Transport
167	136	48	14	8

Table 4 shows the numbers of students funded under PRTLTI and IRCHSS, along with PhD students supported under three other programmes – Irish Aid, North-South and Transport. All the PRTLTI funded students were linked to the Institutes/Centres whereas the IRCHSS students were free to apply to work on any social science topic with any academic supervisor within the Irish system – in effect, at any HEI.²⁹

Option PD 3, namely, where students are part of a national PhD programme, has been discussed again in recent years, as the system has recognised the need for structured PhD programmes involving taught elements. This approach mirrors best practice in US universities for over four decades. The economics community have been committed to such a programme for several years and there is considerable cross institutional cooperation in delivering courses across the colleges in the Dublin area.³⁰ Disappointingly, a recent proposal to PRTLTI for funding of students on such a structured PhD programme in economics did not received funding.³¹

Option PD 4 was the one adopted by the ESRI in the early 1960s, but only where the student studied outside Ireland.³² - Irish students were not eligible for fellowships if they wanted to attend an Irish HEI. The ESRI programme sought to send students abroad precisely because the Irish HEIs at the time could not provide the requisite training. The intention was to build up a steady stream of Irish students going abroad in the expectation that some would return to Ireland if there were jobs available. There was, however, no requirement that these students would return, probably because there was no certainty that jobs would be available when the scheme was established.³³

The IRCHSS scheme today resembles the ESRI scheme,³⁴ which was terminated in 2004, directly in response to the development of the IRCHSS programme.³⁵ There are some marked differences however.

- **Scale:** IRCHSS has funded at a rate of approximately 10 new students per year whereas the ESRI funded on average 3 students
- **Funding levels and Costs:** IRCHSS funds up to four years of study whereas ESRI typically provided funding for two and at most three years – students typically obtained local funded (e.g., teaching assistantships) to support them in their latter years. We estimate that the direct cost of funding 136 students

²⁸ The numbers here are not directly comparable – the IRCHSS students are in economics and sociology only whereas the students funded under the other schemes are more widely social science, e.g., they include political science.

²⁹ The Irish Aid and North South programmes set the broad area of study but students were open to study at a wider range of Institutions. See Appendix 2.

³⁰ Throughout the 1990s there were intermittent discussions within the economics community about the possibility of establishing at Dublin PhD but none of these came to fruition.

³¹ The non-funding is all the more disappointing since there is a recognised dearth of PhD trained economists in Ireland.

³² Another form of research capacity building undertaken by the ESRI was the inauguration of the Research Assistantship posts in the late sixties, continuing up to the present. These are two year non-renewable posts designed to give recent graduates experienced of undertaking research. About 160 students have served in this grade since its inception and 40 per cent of these RAs went on to receive ESRI fellowships to study abroad. Former ESRI Research Assistants are listed on the ESRI Website at http://www.esri.ie/staff/research_alumni/

³³ The individuals who received ESRI Fellowships can be found at http://www.esri.ie/staff/esri_fellowship_holders_1/

³⁴ The quality of what could be provided by way of supervision in the past decade simply was not available in Ireland at the time the ESRI scheme was established in the early 1960s. Arguably, given the developments in Irish universities from the late 1980s it would have made sense for an IRCHSS type programme to be started much earlier and for the ESRI scheme to be terminated at that point.

³⁵ The ESRI decision to terminate the programme was also influenced by resource pressures. It spent 3-4 % of its GIA on PhDs in the 1970s, 2-3% and 1980s, 1-2% in 1990s.

under IRCHSS has been about €4.5m³⁶ whereas the direct cost of supporting the 119 ESRI students was €2.3m in 2004 prices. Obviously there are further indirect costs in relation to the IRCHSS students [e.g., unit cost per graduate student] which do not apply in the case of the students who studied abroad. Thus, the cost per student in the ESRI scheme was about half that applying to the IRCHSS scheme.

- **Learning Environment:** Whereas most ESRI-funded students would have entered taught/structured PhD programmes, IRCHSS students are only now having this opportunity. Furthermore, the students who studied under the ESRI scheme experienced a greater diversity than is possible at the small number of HEIs in Ireland – ESRI students went to some 44 different institutions, with the largest numbers concentrated in Oxford, LSE, Harvard, and Cambridge.³⁷

During the four decades of the ESRI Fellowship scheme some 120 students were supported in their foreign studies. It represented a significant investment of government money and provides an opportunity now to examine how successful the scheme was over time, given that all investment in human capital takes time to yield returns. Putting the question bluntly, how much did Ireland get out of funding these students, and more specifically, how many of the supported scholars returned to Ireland?³⁸ Because data had been maintained on the individuals who had been supported within the Institute and because it is possible to discover where these individuals went, we have been able to address this question and look at the characteristics of the students to explore:

- What the balance was between disciplines [Economics and Sociology/Social Psychology]?
- What the balance was between genders?
- Where they studied – North America or Europe?
- Where they work now, in terms of country and type of employment – research, civil services, public service, international organisation, private sector?

Most specifically, we were interested to see what proportion of the supported students returned to Ireland and whether this differed as between the first 20 and the latter 20 years.

Table 5 gives a breakdown of the 119 students who received ESRI fellowships during the period 1961 to 2002, classified by gender and discipline. It distinguishes two periods 1961 to 1979 and 1980 until the termination of the fellowship scheme in 2002. The various social science disciplines are grouped into “Economics” and “Other” which is mainly composed of sociology and social psychology. The balance between disciplines did not change very markedly over time with economics accounting for about 60 per cent of the students in each period. [This contrasts sharply with the IRCHSS scheme which funded about twice as many sociology students as economics students.] The gender balance among ESRI fellows did, however, change substantially over time: some 17 per cent of the students were female in the early period in contrast to 46 per cent in the later period. The increase in the number of female students was especially pronounced in the disciplines other than economics. In the earlier period, about three quarters of those in “Other” disciplines were male and a quarter female. In the later period, these proportions were almost exactly reversed.

³⁶ This is based on the assumption that students are funded for approximately 2.5 years.

³⁷ Over 27 percent of the students attended these four universities.

³⁸ Mary Daly notes that “from the 1960s the number of Irish graduates in economics and the social sciences who obtained post graduate training overseas appears to have risen sharply, or, alternatively an increasing number of economists were returning to Ireland on completion of their studies.”

Table 5: ESRI Fellows classified by Period, Gender and Discipline

Period		Economics		Other		All Disciplines	
		No.	%	No.	%	No.	%
1961-1979	Males	32	<i>88.9</i>	16	<i>72.7</i>	48	<i>82.8</i>
	Females	4	<i>11.1</i>	6	<i>27.3</i>	10	<i>17.2</i>
	Total	36	<i>100.0</i>	22	<i>100.0</i>	58	<i>100.0</i>
1980-2002	Males	27	<i>75.0</i>	6	<i>24.0</i>	33	<i>54.1</i>
	Females	9	<i>25.0</i>	19	<i>76.0</i>	28	<i>45.9</i>
	Total	36	<i>100.0</i>	25	<i>100.0</i>	61	<i>100.0</i>
1961-2002	Males	59	<i>81.9</i>	22	<i>46.8</i>	81	<i>68.1</i>
	Females	13	<i>18.1</i>	25	<i>53.2</i>	38	<i>31.9</i>
	Total	72	<i>100.0</i>	47	<i>100.0</i>	119	<i>100.0</i>

Note to Table 5: In one case, country of fellowship was unknown.

Table 6 shows the countries to which the students went, again distinguishing between periods and disciplines. Overall, about half of the students went to European HEIs (almost entirely in the UK) and about half to North America, predominantly the USA. North America became somewhat more popular in the later period with about 55 per cent opting for it in contrast to 43 per cent in the earlier period.

Table 6: ESRI Fellows classified by Period, Country of Fellowship and Discipline							
Period	Country of Fellowship	Economics		Other		All Disciplines	
		No.	%	No.	%	No.	%
1961-1979	Europe	20	<i>55.6</i>	13	<i>59.1</i>	33	<i>56.9</i>
	North America	16	<i>44.4</i>	9	<i>40.9</i>	25	<i>43.1</i>
	Total	36	<i>100.0</i>	22	<i>100.0</i>	58	<i>100.0</i>
1980-2002	Europe	15	<i>46.9</i>	12	<i>42.9</i>	27	<i>45.0</i>
	North America	17	<i>53.1</i>	16	<i>57.1</i>	33	<i>55.0</i>
	Total	32	<i>100.0</i>	28	<i>100.0</i>	60	<i>100.0</i>
1961-2002	Europe	35	<i>51.5</i>	25	<i>50.0</i>	60	<i>50.8</i>
	North America	33	<i>48.5</i>	25	<i>50.0</i>	58	<i>49.2</i>
	Total	68	<i>100.0</i>	50	<i>100.0</i>	118	<i>100.0</i>

Note to Table 6: In 10 cases, current location was unknown.

Table 7 shows the numbers of fellowship recipients who are now known to be living in Ireland. Overall, about 56 per cent of students whose current location is known (information on ten of the 119 students was not available) had returned to work in Ireland. The different disciplines showed contrasting patterns in the two periods. In the earlier period up to 1979, 61 per cent of economics fellows had returned in contrast to 47 per cent of those from 'Other' disciplines. In the later period, the percentage of economics fellows who had returned fell to 53 per cent while the percentage of those from other disciplines who returned rose to 59 per cent. Analysis by gender suggests that women are more likely than men to return: 67 per cent of women recipients returned to Ireland in contrast to 51 per cent of men.

Period	Current Location	Economics		Other		All Disciplines	
		No.	%	No.	%	No.	%
1961-1979	Ireland	19	<i>61.3</i>	9	<i>47.4</i>	28	<i>56.0</i>
	Elsewhere	12	<i>38.7</i>	10	<i>52.6</i>	22	<i>44.0</i>
	Total	31	<i>100.0</i>	19	<i>100.0</i>	50	<i>100.0</i>
1980-2002	Ireland	17	<i>53.1</i>	16	<i>59.3</i>	33	<i>55.9</i>
	Elsewhere	15	<i>46.9</i>	11	<i>40.7</i>	26	<i>44.1</i>
	Total	32	<i>100.0</i>	27	<i>100.0</i>	59	<i>100.0</i>
1961-2002	Ireland	36	<i>57.1</i>	25	<i>54.3</i>	61	<i>56.0</i>
	Elsewhere	27	<i>42.9</i>	21	<i>45.7</i>	48	<i>44.0</i>
	Total	63	<i>100.0</i>	46	<i>100.0</i>	109	<i>100.0</i>

Finally, Table 8 shows where the students who have returned to Ireland are employed. There are marked variations between the disciplines in relation to this characteristic. Just over half of the Economics fellows are employed in research or academic posts while 48 per cent are employed in other areas, mainly the Irish public sector. Only 8 per cent of those from other disciplines who returned to Ireland were working outside research/academia.

Current Employment	Economics		Other		All Disciplines	
	No.	%	No.	%	No.	%
Research/Academic	19	<i>52.8</i>	23	<i>92.0</i>	42	<i>68.9</i>
Other	17	<i>47.2</i>	2	<i>8.0</i>	19	<i>31.1</i>
Total	36	<i>100.0</i>	25	<i>100.0</i>	61	<i>100.0</i>

5. CONCLUDING COMMENTS

Ireland has seen a rapid increase in public investment in social science research in the past decade - the first ever significant investment made in research in Irish HEIs over and above the investment through the core grant. This paper has looked at just some aspects of that investment and this final section explores some issues for consideration that are suggested by the analysis.

The scale of the recent programme of investment is very large, and exceptionally so in the context of the earlier funding for social science research in Ireland. Is it timely to ask what plan is envisaged to ensure that, provided that they produce excellent research, these institutes/centres will continue to be funded? In the case of the PRTLL, what responsibilities do their institutions have to support them, given that they were proposed for strategic funding precisely because the relevant HEI(s) nominated them? While it is reasonable that they be expected to generate income from other sources, e.g., EU grants, if the core level of funding is inadequate, the potential of these investments will not be realised and researchers who were drawn to Ireland by this strong commitment to research will depart.

Second, is it timely to review the original missions for these institutes to establish whether increased emphasis needs to be placed on the production of research that would provide evidence for Irish policy making in Ireland? This only makes sense if the Irish policy community genuinely wants such evidence.³⁹ Of course, it should not be expected, and indeed would not be desirable, that all social science research should be policy focused any more than that all scientific research should be very applied. In the absence of defining the mission more clearly, such institutes/centres could find themselves coming under unfair criticism in relation to their outputs. A further issue in relation to policy research is that issues change over time with correspondingly different skill sets needed. Appendix 3 shows how research areas within the ESRI have changed over five decades.

Third, consideration should be given to the likely future career paths of graduates who pass through the system, both from the point of view of the graduates themselves and from the national interest. Without engaging in labour market planning, the programmes should be designed to be broadly compatible with future employment demands.⁴⁰ It is striking that about half of those who received ESRI fellowships to study economics are now employed outside academia/research (mainly in the public sector) whereas about 90 percent of those in other disciplines are employed in research.

Fourth, in relation to PhD numbers, what approach should be adopted and how should PhD programmes be organised in the future if funding is not forthcoming? Should Ireland consider adopting a policy of only allowing institutions to take on PhD students where standards can be guaranteed? What scale of PhD numbers would represent a steady state? And a related issue - what should be the role of post-docs in the social science context? In terms of evaluating the effectiveness of PhD and post-doc programmes, the evidence in Section 4 points to the importance of collecting the relevant data on graduates. Some 56 percent of those who got support for studying for PhDs abroad from the ESRI returned to Ireland, and this is without having any requirement to do so. Is it possible to compare that performance against other schemes/programmes and does it say anything about what we might expect to see happen in relation to PhDs at Irish HEIs? Even though we have the potential to run good PhD programmes in Ireland, should Ireland consider having some scholarships that would support Irish students to studying abroad? If such a scheme were introduced, could it contain some future commitment on the part of the student?

Finally, we return to a point raised above – what level of support is sustainable and how can we ensure that the stop/start patterns in recent years can be avoided in the future?

³⁹ In paper to the Royal Irish Academy in 2010, Frances Ruane pointed the relative lack of interest in evidence for policy making in Ireland in recent times. See Frances Ruane, *Research and Policy Making*, ESRI Working Paper 354, Sept 2010.

⁴⁰ This is an issue that could be seen as a factor for all small countries.

APPENDIX 1: SSISI AND THE ESTABLISHMENT OF THE ESRI

The establishment of the ESRI as a centre for policy research is directly related to this Society. In her book on the history of the Society in its 150th year, Mary Daly sets out in some detail the role of the society in promoting the development of economic research in Ireland, through the establishment of what became the ESRI.⁴¹ The Society had seen itself as providing a crucial forum for public discussion of societal issues that drew on empirical evidence and began to recognise the possibility that the social sciences, and especially economics, could play a role in changing the economic and social dynamic in Ireland. Daly writes: “Although the Society continued to provide an important forum for discussing economic and social questions, perhaps its most important contribution to the advancement of economic knowledge was to act as midwife to the Economic Research Institute.”

TK Whitaker, who was a member of the SSISI Council, suggested that the foundation of an independent economic research institute would be an ideal use for the funds that the Ford Foundation indicated it was willing to provide for Ireland.⁴² Whitaker saw this as an opportunity “to meet the growing need for more advanced economic research within Ireland”. Since Ford Foundation’s approach was not to engage directly with government,⁴³ but rather to deal with proposals from universities, learned institutions or other institutions in civic society, Whitaker suggested that the Society take the initiative of becoming the applicant for the grant.

Mary Daly describes how the Society’s Council approved Whitaker’s proposal that it sponsor the establishment of an Economic Research Institute in August 1959. The Society’s proposal stressed the need for the research to be linked to the *Programme for Economic Expansion* – in effect to be research for policy and the list of research projects suggested in the proposal were: “the incidence of tariff protection; the factors affecting productivity in Irish industry; moves towards European integration; short-term forecasting; and the market for Irish livestock in the British market”. In Daly’s view, “the application also reflected T.K. Whitaker’s preference that the government’s planning process should be monitored by an independent body”. In addition, the Institute was seen by the society as a potential employer for young Irish economists who had been trained abroad.⁴⁴ Daly points out that there was broad support from other members of the Society for the proposal with one exception.⁴⁵ The Ford Foundation subsequently asked the Society to confirm that ‘no part of the Institute’s activities would be political in nature’, a commitment which has remained in place since then.

The link between the Society and the Institute was reflected in the composition of the ESRI’s original Council some of whom served well into the 1980s. Roy Geary, the Institute’s first Director, had been a key figure in the Society all his life and hence the strong connection between the SSISI and the ESRI remained. Meetings of the Society were held in the Institute’s lecture hall during the period 1982/83 up to 2006/7.⁴⁶ There was a rapid increase in the number of active social science researchers in Ireland over the 1960s, with the growth in economist numbers in the universities, the establishment of departments of sociology/social science and the extension of the ERI’s remit to cover sociology and social psychology [involving its name change to the ESRI]. This growth generated an increasing demand for outlets for both research papers and seminar presentations. This led to a proposal for the Society to extend its role to becoming a Journal, i.e., publishing papers that were not actually read to the Society.⁴⁷ This proposal was rejected⁴⁸ and the need for journal outlets was met by the creation of *The Economic and Social Review* in 1969. The need for more presentation outlets was met by the establishment in the 1960s of what subsequently became the Irish Economic Association Conference, the establishment of the ESRI Thursday Seminar Series in the late 1960s and the Dublin Economic Workshop Seminar Series in the 1970s.⁴⁹

⁴¹ The quotes in this section are directly from Chapter 5 in Daly’s book.

⁴² The Ford Foundation had funded a similar institute in India in 1955.

⁴³ This approach mirrors that adopted in more recent times by the Atlantic Philanthropies

⁴⁴ The Institute’s role in promoting foreign training of social science researchers is discussed in Section 4.

⁴⁵ Mary Daly notes that Dr Tom Walsh, Director of the Agricultural Institute feared that the new institute might duplicate its work.

⁴⁶ The transfer of the Society meetings back to Academy House was negotiated by the present Director in 2006, with the specific objective making it easier for civil servants and others who had been long standing participants in Society meetings to attend.

⁴⁷ According to Daly, the proposal was motivated by concern that the Society would be damaged by an entirely new journal.

⁴⁸ Daly reports this as being due to the fact that it would alter the ‘essential character of the Society’.

⁴⁹ The Irish Economic Association from its origins has been an all-island body, which is not surprising given its links to the Society and the Royal Irish Academy, both of which were retained their all-island status after Independence. Presentations at the ESRI seminar series were for the most part policy-orientated and based on ESRI research, while the DEW papers had a stronger theoretical flavour.

APPENDIX 2: PRTL I SUPPORT FOR GRADUATE STUDENTS

Social Science PHD students supported directly by PRTL I Programmes Cycles 1-4⁵⁰

Programme	Institutions	PhD No
Irish Social Science Platform (ISSP)	DCU, NUIG, NUI M , UCC, UL	57
Centre for Innovation and Structural Change (CISC)	NUIG, DCU, UCD	17
Centre for Transport & Innovation in People	TCD, UCC	18
Institute for International Integration Studies (IIIS)	TCD, NUIM	24
National Institute for Regional and Spatial Analysis	NUIM, DIT, GMIT, WIT, MIC , ITS	12
The Urban Institute	UCD, TCD	33
The Geary Institute	UCD, TCD	6

⁵⁰ Note that this does not cover Cycle 5, a significant focus of which was the provision of funding for a single cohort of graduate students to join structured PhD programmes across a range of disciplines.

APPENDIX 3: EVOLUTION OF ESRI RESEARCH OUTPUT, 1960-2010

Total Publications by ESRI Research Staff RESEARCH AREA					
Total ESRI publications by research area	104	195	263	473	1168
	1960-69	1970-79	1980-89	1990-99	2000-09
Macroeconomics	30	56	86	99	247
Econometrics & Methodology	17	14	13	17	0
Industry/Industrialisation	6	7	10	23	5
Competition & Regulation	0	0	1	1	43
Technology, Innovation & Productivity	0	2	0	1	52
International Economics	0	0	1	1	71
Energy	5	4	10	12	60
Transport & Infrastructure	3	1	5	10	59
Environment & Natural Resources	2	11	21	44	163
Tax, Welfare & Pensions	3	5	21	38	118
Labour Market	8	22	39	83	221
Demography & Migration	5	22	14	36	130
Regional Studies	7	11	7	18	28
Housing	2	2	6	9	0
Education	2	7	15	28	104
Health	3	5	15	54	160
Equality	0	0	0	0	304
Social Inclusion	1	16	23	80	200
Social Cohesion & Quality of Life	4	13	22	17	78
Social Psychology	1	8	6	0	1

Note: These figures include all publications. While this is a very crude measure of output, it does indicate how the pattern of research has changed over time, with increasing publications in areas that cross over between economic and social research.