ANNUAL REPORT 2008 – REPORT OF THE COUNCIL

General Overview

While the economic downturn in 2008 had been long anticipated, the scale and speed of the downturn exceeded what the Institute had expected. While the medium-term outlook for the Irish economy is still positive, its prospects are less than those outlined in the ESRI's 2008-2015 Medium-Term Review, published in May 2008. The domestic growth rate is expected to be lower both because of the slower pace of world growth anticipated over the coming years and the substantial burden on the economy of dealing with the structural changes consequent on the collapse in construction and the banking crisis. It is extraordinary now to think that when the ESRI *Quarterly* Economic Commentary published in June of 2008 stated that the Irish economy was in recession, the Institute was seen by some as damaging the economy by declaring a 'recession'. Looking back, it is now very clear the extent to which there had been a de-coupling of rhetoric from economic reality. The new reality points to the need for research, at both the macro and micro levels, to inform the tough decisions that government must take to set the economy back on a sound growth path, to restore the public finances and formulate appropriate policies to tackle growing unemployment.

There is widespread agreement that Ireland must ensure that strategies for returning the economy to growth, take into account considerations of social equity and environmental sustainability. Consequently, the Institute research agenda, which is structured in terms of the three broad Lisbon Strategy Goals (Economic Growth, Social Progress and Environmental Sustainability), is highly relevant to the new challenges that Ireland faces. Within this structure, we can explore the issues that are central in this regard, such as competitiveness, fiscal stability, unemployment, the costs of tackling global warming, and the interconnections between them. In doing this, we draw on decades of research that cover earlier periods of our economic and social history where competitiveness had to be regained, unemployment rates were very high and the government deficit was extremely serious.

¹ The research agenda is set out in ESRI Strategic Plan 2008-2013: Research for a Changing Ireland. The Plan, which was posted on the ESRI website in April 2008, identified the Institute's vision and mission, together with the research areas for particular development, and the required actions needed to achieve these developments.

In terms of restoring the public finances, the Institute's macro model (Hermes) and tax benefit model (SWITCH) can provide illumination on the implications for the public finances of different policy choices. SWITCH is being used to inform the broad work on the re-structuring of the tax system under consideration by the Commission on Taxation as well as exploring the distributional impact of the significant tax increases in recent budgets. On the expenditure side, research on education and health at the Institute can help inform on how best to increase the effectiveness of public spending in these areas.

During 2008 ESRI researchers published 64 journal articles and book chapters, 58 working papers, 52 monographs (published by ESRI and other agencies), and 4 economic commentaries. The 2008 Geary Lecture, delivered by Professor David Audretsch (University of Indiana) on November 13, was titled: *The Entrepreneurial Society*. In addition to the Institute's regular series of Thursday seminars, which are open to researchers and policymakers, the Institute hosted several important conferences and workshops in 2008. These included the annual Pre-Budget Conference (held jointly with the Foundation for Fiscal Studies) which provided an important Forum for an early discussion by economists and policymakers of research relevant to the economic crisis. To support the developing research agenda, several additional researchers joined the Institute in the macroeconomics, energy, environment and health areas during 2008.

In the next sections of this report, we outline the key research undertaken during 2008 and also work undertaken at the Institute on surveys and information compilation.



Mary Finan
Chairman



Frances Ruane
Director

Overview of Research Activities

Linked to its Strategic Plan, the ESRI's research programmes are now grouped under four general headings:

- (i) research which is focused on informing policies related to *Economic Growth*;
- (ii) research which seeks to inform policies relating to Social Progress;
- (iii) research at the interface between Economic Growth and Social Progress; and
- (iv) research at the interface between Economic Growth and Environmental Sustainability.

The following paragraphs summarise research activities and findings in these areas during 2008. Research by ESRI staff members is published in a range of outlets including international and national journals, books and book chapters, the ESRI's own research series, reports for commissioning agencies, etc. Details on publications and research funding for 2008 are set out in the Institute's *Annual Review of Research*, which will be published on the ESRI Website.

(I) ECONOMIC GROWTH

There are three programmes of research in this area: Macroeconomics (coordinated by Professor John Fitz Gerald); International Economics (coordinated by Dr Iulia Siedschlag); and Technology, Innovation and Productivity (coordinated by Dr Iulia Siedschlag).

Macroeconomics

In May 2008 the ESRI published its latest *Medium-Term Review* analysing the recent behaviour of the Irish economy and the implications of this behaviour for the potential growth rate of the Irish economy in the medium term. In November 2008 a report was published by the ESRI as part of the EUROFRAME Network of European economic research institutes considering the impact of the world recession on the EU economy. This report fed into the ongoing research underlying the ESRI's *Quarterly Economic Commentary*. The research in this area is primarily funded under grant in aid from the **Department of Finance**.

Over the course of the year research was carried out on:

- (a) The macro-economic effects of taxation, especially of carbon taxes: This research indicated that because a carbon tax would have little impact on the labour market, its negative economic consequences would be much less than those for an equivalent increase in income taxation.
- (b) The misperception of inflation by Irish consumers: This research reveals systematic overestimation of inflation by Irish consumers, which varies by social group. There is evidence that inflation misperceptions are linked to attitudes and intentions with respect to consumption and saving and, hence, are likely to affect household decision making. The findings, therefore, raise issues regarding the relationship between financial literacy and consumer behaviour.
- (c) The factors driving the market services sector. The changing structure of the world economy means that many parts of the services sector are now tradable. As a result, international competitiveness matters much more for this sector today than it did twenty years ago. Today, 40 per cent of Irish

exports are services and this percentage is likely to increase over the coming years.

(d) The macro-economic impact of changing the rate of corporation tax: While the reduction in the rate of corporation tax applicable to the services sector after 1994 had a significant effect on economic growth, it was not one of the primary causes of rapid growth during the boom period of the late 1990s.

International Economics

In 2008, this research programme comprised three thematic areas:

- (a) European Economic and Monetary Union (EMU): Research in this area focused on the analysis of macroeconomic differentials and adjustment mechanisms in the Euro Area and the effects of the single currency on trade. Research results indicate that output growth differentials in the Euro Area were mainly due to underlying trend growth differentials while the cyclical components of growth rates have become more synchronised.
- (b) International Capital Flows and Financial Market Integration: Research in this area is part of an international research consortium led by the ESRI in cooperation with nine leading universities and research institutes in Europe, funded under the EU 6th RTD Framework Programme. The success of China in attracting foreign direct investment has raised concerns that it may have been at the expense of other countries and regions. Our research suggests that, ceteris paribus, foreign direct investment into China has been complementary to foreign direct investment into the European Union's countries. It appears that countries which attract mainly foreign direct investment driven by market access adjust better to competitive pressures from China.
- (c) Trade and Firm Heterogeneity: Research in this area is part of an international research project and is funded under a grant from the Irish Research Council for the Humanities and Social Sciences. Research shows that exporters are more productive than non-exporters when observed and unobserved heterogeneity are controlled for. There is strong evidence in favour of self-selection of more productive firms into export markets. The results for the Republic of Ireland are part of an international study that documents differences in exporter premia across countries in identically specified empirical models. Further research in this area, funded by Enterprise Ireland, focused on the links between indigenous and foreign industry in Ireland. Research shows that just under half of the number of indigenous enterprises trade with foreign-owned enterprises that are based in the Irish Republic. There is some evidence that trade with local subsidiaries of foreign multinationals is a substitute for exports.

Technology, Innovation and Productivity

This research programme focused on two themes in 2008:

(a) The Economic Impact of Information and Communication Technologies (ICT): Research in this area has taken place as part of an international research project funded by the European Commission's Institute for Prospective Technological Studies. The research team includes international and national experts from eleven European countries. Research in 2008 focused on an in-depth analysis of the consequences of ICT use and globalisation on

regional economies. The case study analysis on Southern and Eastern Ireland highlights the role played by the foreign-owned high-tech ICT-using sector in the emergence of the indigenous software sector.

(b) International Diffusion of New Technologies: Research in this area is part of an international research consortium led by the ESRI in co-operation with nine leading universities and research institutes in Europe, funded under the EU 6th RTD Framework Programme. Multinational enterprises play a major role in the internationalisation of R&D and the diffusion of new technologies. Our research shows that the location choice of R&D foreign affiliates is driven by the size of demand, agglomeration economies, as well as supply-related factors such as access to high skills, high level of technology development, proximity to centres of research excellence, ICT infrastructure, flexible labour markets and low production cost.

(II) SOCIAL PROGRESS

There are three programmes of research under Social Progress: Equality (coordinated by Dr Helen Russell and Dr Fran McGinnity); Social Inclusion (coordinated by Dr Helen Russell); and Health (coordinated by Professor Richard Layte and Professor Miriam Wiley).

Equality

ESRI research on Equality investigates inequalities in opportunities and in outcomes, exploring the processes that lead to inequality. The research has a strong policy focus, assessing the role of public policies in underpinning or reducing inequalities.

The main body of research in this area is carried out as part of the Research Programme on Equality and Discrimination, funded by the Equality Authority. This programme seeks to investigate the social situation of groups covered by the nine grounds of the Equality Legislation (gender, marital status, family status, sexual orientation, religion, age, disability, ethnicity and membership of the Traveller community), and establish the extent of discrimination experienced by these groups. Three studies were published jointly by the ESRI and the Equality Authority during 2008: The Experience of Discrimination in Ireland; Gender Inequalities in Time Use and The Experiences of Ethnic Minorities and Immigrants in the Irish Labour Market. The three studies highlight both emergent and long-standing challenges to achieving equality of opportunity in Ireland. The research shows that changes in Irish society have led to new inequalities, for example, among immigrants and minority ethnic groups but these co-exist beside 'old risks' such as disability, age and gender. The timeuse study further demonstrates the ongoing importance of gender in structuring the daily lives of men and women and in shaping the choices available to them.

Three further studies – discrimination in recruitment, the gender pay gap in Ireland, and changing female participation in the Irish labour market – were completed during 2008 and will be published in 2009. A final project on multiple inequalities drawing on data from the 2006 Census of Population was initiated at the end of 2008.

A study of pregnancy related discrimination in the workplace was commissioned by the Crisis Pregnancy Agency at the end of 2008. The project will be carried out during 2009.

Social Inclusion

As part of the programme for research for the **Office for Social Inclusion** (OSI), throughout 2008 several ESRI staff members were involved in preparing a series of *Social Portraits* on a range of life cycle groups. *Social Portrait of the Working Age Population* was published in 2008. The portraits are designed to be of use to members of the public as well as policymakers.

Under the OSI programme, a project relating to The *Life Cycle Perspective on Social Inclusion* involving an analysis of data from the EU Survey on Income and Living Conditions (EU-SILC) was completed in 2008. It examines issues of social inclusion and poverty in the context of the changing nature of the welfare state and the emergence of new social risks. It implements a life-cycle approach and provides a comprehensive analysis of related issues using EU-SILC. The findings of the project were published in the ESRI Research Series in 2008.

Another key output of the OSI programme was a study examining the options for the future development of the Irish welfare state entitled *Tackling Low Income and Deprivation: Developing Effective Policies*, which was published in the ESRI Research Series in June 2008. The structure of Ireland's welfare state is placed in an international context, and a review of demographic developments and prospects clarifies the nature of future challenges for the system. Policy issues arising for the main "vulnerable groups" identified in the National Action Plan for Social Inclusion are considered.

Throughout 2008 research relating to social inclusion at the national and European levels, arising from the OSI programme and the ESRI's involvement in the EU EQUALSOC Network of Excellence, was published or accepted for publication in a range of leading international journals.

Health

Following 18 months of intensive development, piloting, fieldwork and analysis, the first report from the Irish National Health and Lifestyle Survey (Slán) was published in April 2008. This received a great deal of coverage in the media and provided important data on the health and lifestyles of Irish people. The Slán data are now the subject of a programme of research at the ESRI on a range of issues including the health of migrants in Ireland relative to the native population and the impact of mental health on smoking behaviour. Other work on health and lifestyles was published in 2008, including a paper on the influence of level of education, self-efficacy and material deprivation on smoking behaviour. Work continued on a major project, funded by the **Health Research Board** and the **Health Services Executive**, projecting the demographic structure in Ireland to 2021, so as to assess the impact of demographic change on the demand for and delivery of health care in Ireland to 2021. The outcome of the project will be published in 2009.

Primary care services in Ireland continued to be an important aspect of ESRI work in health in 2008. Research comparing the cost effectiveness of post-acute care for older people provided in community hospitals with general

hospital care was published in 2008, together with a series of papers that analysed the impact of medical card status, income and health need on frequency of GP visiting. A further paper explored the impact which the extension of medical card eligibility to over 70s had on GP visitation.

(III) ECONOMIC GROWTH AND SOCIAL PROGRESS

Given the integrated approach to economic and social policy in Ireland and the growing awareness of their interrelatedness in the EU, it is not surprising that quite a large amount of ESRI research takes place in the interface between these two domains. Five research programme areas fall under this category of research: Education (coordinated by Professor Emer Smyth); Labour Market (coordinated by Professor Philip O'Connell); Migration (coordinated by Professor Alan Barrett); Social Cohesion and Quality of Life (coordinated by Dr Helen Russell); and Taxation, Welfare and Pensions (coordinated by Professor Tim Callan).

Education

ESRI's longitudinal study of second-level students, funded by the **National Council for Curriculum and Assessment** (NCCA) and **Department of Education and Science** (DES) continued throughout 2008. This study is the first of its kind in Ireland and explores student experiences as they move through the schooling system. During 2008, analyses were carried out on the experiences of fifth and sixth year students. Two supplementary projects, looking at parental perceptions of the schooling system and early school leaving among the student cohort, were also conducted.

During 2008, work was carried out on three major projects funded by the **Department of Education and Science** (DES). The first was a large-scale study of newcomer (immigrant) students in primary and post-primary schools, a study designed to contribute to policy development in the area of provision for diversity within schools. The second DES-funded study has explored the suitability of current school design for teaching and learning. Thirdly, analyses were carried out for the DES on the 2007 National Survey of School Leavers, which provides invaluable information on young people's pathways into further education and the labour market.

A large-scale study funded by the **Higher Education Authority** (HEA) explored the reasons for low participation in higher education among the children of non-manual workers. This study is designed to contribute to informing policy in relation to increasing equity in educational participation. The HEA also funded a study of the costs of participating in higher education for previously under-represented groups, which contributes to some of the current debates on the funding of higher education.

At the beginning of 2008, members of the education team took on the coordination of a large-scale **European FP7**-funded project on the relationship between religion and schooling. The study explores the transmission of religious and secular beliefs and values through the education system and the family and is part of a collaborative project involving institutions in Belgium (Flanders), Germany, Malta, Scotland and Italy. In addition, members of the education team were active in the **EU-funded EQUALSOC** network, with their involvement yielding published papers on the impact of field of study on gender segregation in the labour market and on students' workload. During 2008 research on topics including transitions within and beyond the school system, truancy, private tuition ('grinds'), part-time employment among third-level students, youth unemployment and the returns to education was published in a range of international journals.

Labour Market

Development of the Institute's programme of research on the labour market progressed in 2008. A series of papers on the returns to education in Ireland and elsewhere were published in international journals.

Direct access to the micro-data from the large-scale *National Employment Surveys* has made possible a wide range of work on a range of topics, including the gender wage gap, on behalf of the **Equality Authority**, as well as new analyses of the impact of labour market institutions on earnings, and the public-private sector wage gap. The latter paper showed that the public-sector wage premium increased markedly between the two waves of the National Employment Survey collected in 2003 and 2006 and suggested that this resulted from central wage setting institutions under Social Partnership as well as the Benchmarking process. Journal articles and book chapters were also published on the labour market returns to education and on the determinants of work-related training among employees.

Work continued in the National Pilot Profiling of the Unemployed project, carried out in partnership with the **Department of Social and Family Affairs**. This large-scale national experiment, involving over 45,000 unemployed claimants, will help identify those unemployed people most likely to experience difficulty gaining employment and at greatest risk of entering long-term unemployment. This project is particularly relevant at a time of deteriorating labour market conditions. In 2008, ESRI researchers began a follow-on project that involves combining the profiling data with administrative records of the National Employment Action Programme to evaluate the impact of the range of activation measures currently implemented to assist unemployed individuals re-enter the workforce. These research projects offer policymakers essential information to inform the allocation and targeting of effective and appropriate programmes for the unemployed.

Migration

Development of the Institute's programme of research on immigration continued in 2008. Papers on the occupational attainment of Ireland's immigrants and on the analysis of welfare use by immigrants in Ireland and the UK were published in international journals. Work began under a project funded by the **Irish Research Council for the Humanities and Social Sciences** for a two-year period titled *Immigrants' Characteristics, Experiences and Impacts*. The first published paper from this project showed how the CSO's Quarterly National Household Survey provides a reliable data source for migration research. A second paper on immigrant earnings has appeared as an ESRI working paper.

During 2008, four published reports were prepared for the European Commission Directorate General for Justice, Freedom and Security as part of the activities of the European Migration Network (EMN) Irish National Contact Point. The EMN was established with a permanent legal base in May 2008. Published reports included commentary on migration and

asylum flows into Ireland and policy developments for the years 2004 to 2007. Also in 2008, a major reference report was compiled on immigration in Ireland with a focus on the legal dimensions: *Handbook on Immigration and Asylum in Ireland 2007*.

Under the ESRI's programme of research which is funded by the **Equality Authority**, a report was published on the labour market experience of immigrants in Ireland, with particular reference to ethnicity. This added a further layer to our understanding of the experiences of immigrants in Ireland.

Social Cohesion and Quality of Life

The research programme on sport and exercise produced two significant publications in 2008. Sporting Lives, the latest research report funded by the Irish Sports Council, used recall data on participation in sport and exercise activities to reconstruct the modern history of grassroots Irish sport. The findings revealed that today's young adults are more active in sport than their parent's generation, chiefly through increased participation in personal exercise activities rather than traditional team games. The second publication, Getting Out What You Put In, which was prepared for the 2009 Budget Perspectives conference, analysed the returns to public investment in sport over the past ten years and suggested alternative policy options for increasing participation in sport and exercise.

Within the **EQUALSOC** Network of Excellence, ESRI researchers edited a special issue on *Reconciling Work and Family Life* which will be published in 2009 in the leading international journal on quality of life *Social Indicators Research*. The special issue offers readers insights into the interface between work and family life in the new European Union, touching on recent changes in forms of employment and family forms, changes in work intensity, upskilling, debates on time poverty, on social class, on social comparison, job allocation, gender and motherhood wage penalties and gender differences in the distribution of paid and unpaid labour. The number of countries analysed in each paper varies from 5 to 25.

In conjunction with the School of Applied Social Sciences in UCD, the ESRI undertook a new analysis of changing family structures and fertility patterns in Ireland, funded by the **Family Support Agency**. This project has been granted access to the 2006 Census Research Microdata File, allowing a more detailed analysis of family change in Ireland than has been possible to date. The findings are due for publication in 2009.

Taxation, Welfare and Pensions

A major report on the development of effective policies to tackle low income and deprivation was published in 2008. This study includes specific chapters on groups vulnerable to social exclusion, and used the ESRI tax-benefit model *(SWITCH)* to construct and explore packages of policy measures which could help to address problems of low income and deprivation.

The *SWITCH* model was once again used to undertake "poverty impact assessment" of the annual Budget in the official Budget day analysis, and by the Institute team to provide independent commentary on the distributional impact of the budget. A related journal article was also produced. A collaboration between the *SWITCH* team and members of the Economic

Analysis division led to a research paper on the distributional implications of a carbon tax.

Work on a major EU-funded project on the Accurate Income Measurement for the Assessment of Policy (AIMAP) led to a journal article on the short-run distributional impact of public education transfers to third level students in seven European countries.

(IV) ECONOMIC PROGRESS AND ENVIRONMENTAL SUSTAINABILITY

The increasing importance of environmental issues is reflected in the four programmes of research that look at issues where economic and environmental factors interact strongly. These programmes are Energy (coordinated by Professor John Fitz Gerald); Environment and Natural Resources (coordinated by Professor John Fitz Gerald); Transport and Infrastructure (coordinated by Dr Edgar Morgenroth); and Competition and Regulation (coordinated by Dr Sean Lyons).

Energy

A major feature of the work of the **Energy Policy Research Centre (EPRC)** has been the development of key research infrastructure in the form of economic models for research. These models are used as the basic tool in much of the work undertaken by the EPRC and funded by its stakeholders.² Model development work included:

- (a) The electricity model covers the all-island electricity sector, modelling the dispatch of generating stations on a half hourly basis. It has been used in preparing forecasts and scenarios on energy use out to 2025.
- (b) Developments of the HERMES, which included more detailed treatment of energy demand from the transport sector, were used to generate detailed forecasts for energy demand to 2025, which were published in the 2008 Medium-Term Review.
- (c) ISus, the satellite model of *HERMES*, used to forecast emissions and resource use, is being developed under funding from the **Environmental Protection Agency (EPA)**, which has used it in its *State of the Environment Report* in mid-2008. This model relates economic activity to a range of emissions, including greenhouse gases.
- (d) FUND, an integrated assessment model of climate change for analysis of international climate policy, is being used to advise the US EPA on climate policy. The model is also used to estimate the economic impact of climate change on Ireland, to simulate international trade in emission permits, and to investigate the implications of uncertainty about the carbon cycle. The research on this programme is funded by the Irish Environmental Protection Agency, the US Environmental Protection Agency and EPRI.

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² The EPRC is funded by a consortium of stakeholders in the energy area including the Department of Communications, Energy and Natural Resources.

(e) HTM, a model of domestic and international tourism, is being used to estimate the impact of regulating aviation emissions, the EU-US Open Skies agreement, and for scenario studies of future aviation (as used in the latest MTR). This project is funded by the **Environmental Protection Agency**.

Over the course of 2008 the EPRC examined a wide range of topics in energy, all of which are policy relevant for Ireland.

- (a) Together with Sustainable Energy Ireland, the ESRI used the existing version of the HERMES macroeconomic model to prepare forecasts for energy use out to 2020. These forecasts are used by government departments and official bodies as part of their ongoing work on energy and the environment.
- (b) Domestic and European climate policy formed a large component of research in 2008, with papers on a carbon tax, alternative instruments for climate policy, and EU emissions trade.
- (c) Work on modelling energy use in transport was intensified with papers on car ownership, modal choice for commuting, the value of rail transport, aviation policy, and road freight.
- (d) The number of fuel poor in Ireland was estimated and the determinants of the risk of fuel poverty were analysed.
- (e) Research on the use of household appliances in Ireland was conducted and the implications for energy efficiency were examined.

Environment and Natural Resources

Current research in environmental economics and resource economics is focused on:

- Forecasting emissions to air (ISus).
- Valuation of environmental (dis)amenities.
- Waste policy (ISus).
- Climate policy in Ireland (carbon tax) and abroad (FUND).

In addition to work on a domestic carbon tax, a study is also underway on European climate policy, financially supported by the **Environmental Protection Agency** (EPA). This research shows that it is feasible to reduce the economic costs of the 20/20/20 package without violating its environmental integrity. Related research shows that there is scope for a substantial reduction of carbon dioxide emissions from aviation, but current policies are misdirected at passenger behaviour and will lead to minimal emission reduction (<1%) for sizeable subsidies (> £1 billion) to industry.

New research, funded by the Environmental Protection Agency, shows that public investment in water supply and conservation has usually been well spent, whereas the returns on investment in wastewater treatment have been much more variable. Household water use varies with age and family structure and increases with "class", i.e., income, education, and occupation. Other research shows that weight-based charging for waste substantially increases recycling and composting, but has no significant effect on illegal dumping.

With funding from the Environmental Protection Agency, the ESRI is extending its economic model for the medium-term forecast to predict emissions to air and water and resource use.

New estimates suggest that Ireland's forests have a considerable value for recreation: €50-60 million per year for Irish residents only.

Transport and Infrastructure

In 2008 transport and infrastructure research has analysed a range of issues, including the determinants of commuting behaviour, the impact of infrastructure investment and the environmental impacts of tourism travel.

Research on the modal choice of commuters in the Greater Dublin Area has shown that those working in the city centre are significantly more likely to walk or cycle, or take public transport to work, suggesting that a greater employment concentration in the city centre may reduce car dependence. The results also highlight the importance of public transport provision in influencing modal choice, even when car ownership, work location and travel time have been taken into account. Analysis of the determinants of car ownership over the period 1995-2001 showed that the strength of the persistence in household car ownership levels creates challenges for policymakers in terms of designing policy initiatives to encourage more sustainable methods of transport.

The impact of LUAS and other rail infrastructure on property values in the Dublin area was investigated using a hedonic house price model. The research shows that proximity to railway stations is found to generate a positive externality as it improves transportation access. The newer transport links, like LUAS, have a greater premium than older rail alternatives, with the largest premium being associated with light rail, followed by heavy rail and commuter transit.

The research programme has covered aspects of the interconnection between transport and tourism. Using a model of international and domestic tourist numbers and flows to forecast tourist numbers and emissions from international tourism out to 2100, it was found that between 2005 and 2100 international tourism will grow by a factor of 12. Not only do people take more trips but these also increase in length, with the growth in tourism mainly fuelled by an increase in trips from Asian countries. Other research has investigated the climate and other destination preferences of Irish tourists, using data for 2006. The research found that different types of tourists have very different preferences. Elderly holidaymakers and family visitors stand out most from the "average" tourist. Preferences for cultural heritage, population density, and temperature discriminate the most between tourist types.

Competition and Regulation

Competition and regulation research was first established as a distinct programme area at the ESRI in the Research Strategy 2008-2013. Previously, competition and regulation topics were addressed in other programmes. The identification of competition and regulation as a separate area reflects the increasing importance of regulation in the Irish economy, on the one hand, combined with a strengthened role for competition policy. Initially

competition and regulation will concentrate on energy, electronic communications and the environment.

Work this year focused on competition and regulation in the energy and communications sectors. A project supported by the **Energy Policy Research Centre** analysed the impact of additional interconnection between Ireland and Great Britain on welfare and competition in the Irish electricity market. In general the impact is positive. In the electronic communications sector, we began research on the adoption of broadband by businesses and households. Using data provided by ComReg and Eircom, we have developed an index of broadband service availability for disaggregated geographical areas in Ireland over time. Finally, in the area of the environment, climate change policy has led to the introduction of new property rights. However, how these rights will be structured and the nature of the markets in which they will be traded are open questions. It is anticipated that ongoing research in this area will be published in 2009.

Surveys and Data from Administrative Records During 2008, survey work continued on the major seven-year research programme involving a longitudinal study of children. This programme is being led jointly by the ESRI and Trinity College, Dublin in collaboration with a consortium of researchers from other national and international universities and research institutions. During 2008 interviewing of over 8,500 9-year-old children and their families was completed. Survey work also began with the families of 10,000 9-month old children.

The first round of major results from this research programme, the most ambitious and complex of its kind ever to have been undertaken in Ireland, will become available in 2009, after which the data will be lodged in the Irish Social Science Data Archive (ISSDA).

By identifying the main factors that contribute to or undermine the well-being of children in 21st century Ireland, the survey and related research will help to frame effective and responsive policies for children and their families. The programme is funded by the **Department of Health and Children** through the **Office of the Minister for Children and Youth Affairs** in association with the **Department of Social & Family Affairs** and the **Central Statistics Office**.

The ESRI, in partnership with an external fieldwork agency, completed the Survey of Prejudice and Tolerance in Ireland (for NUI Maynooth), which replicates surveys conducted by the ESRI in the 1970s and the 1990s. Also, in the first quarter of 2008, the ESRI partnered with an external fieldwork agency to complete the Survey of Conflict Resolution in the Workplace (for Queen's University Belfast (QUB). During 2008, the ESRI also conducted surveys on sports participation and consumer sentiment, which feed directly into ongoing research at the Institute. The ESRI also designed a sample for the pilot survey of TILDA (the national survey on health, retirement and ageing) and for the International Social Survey Program (ISSP). These surveys and survey design exercises drew on the ESRI expertise in designing surveys to the best international standards.

ESRI researchers are now intensive users of the CSO micro data sets across a range of areas and access to these data sets, facilitated by the CSO, is providing new research opportunities that can contribute to policymaking. The key data sets that were used during 2008 were the Census of Population,

Quarterly National Household Survey, EU – SILC, National Employment Survey, and the Census of Industrial Production.

The Institute has responsibility for developing two national data bases from administrative records, under funding from the **Health Service Executive**. During 2008 several reports on the Hospital In-Patient Enquiry (HIPE) and the National Perinatal Information System (NPRS) were published and can be accessed on the ESRI website (www.esri.ie). These annual reports provide easily accessible timely data for individuals or organisations with an interest in perinatal statistics and hospital discharge data. In addition, the HIPE Data Reporter, which facilitates direct access to HIPE data, was web enabled.

As part of its remit for the training of clinical coders, the Institute was engaged in a collaborative project with the Northern Ireland Public Sector Enterprises, and funded by the **EU Phare Transition Facility,** for the development of National Coding Standards within the Czech DRG System. This project concluded in 2008 and involved consultations, workshops and technical advice on aspects of clinical coding, health information systems and the development of DRG systems.³

In April, the Health Research and Information Division hosted a meeting of the European Health Policy Group and a study visit from members of the Hungarian Health Insurance Supervisory Authority. A national information day for the National Perinatal Reporting system was held in October. Research explored in more detail the factors that might influence the choice of a national standard for measuring case mix within the Irish hospital system and on changes in the mix of patients treated within the Irish hospital system.

Conclusion

2008 was a busy year for the Institute, with contributions made in all areas of our research strategy. The consolidation of research in key areas where we can achieve excellence is central to our mission to produce policy-relevant research. We recognise the importance of two key factors to realising our mission – the commitment of all our staff and the financial support of national and international bodies.

³ Twinning project CZ 2005/IB/SO/03 Final report (www.mzcr.cz/Odbornik/file.aspx?id=308&name=132_Summary_Reccomandations.pdf) [sid]