

Overview of 1997

Record Growth In Job Creation

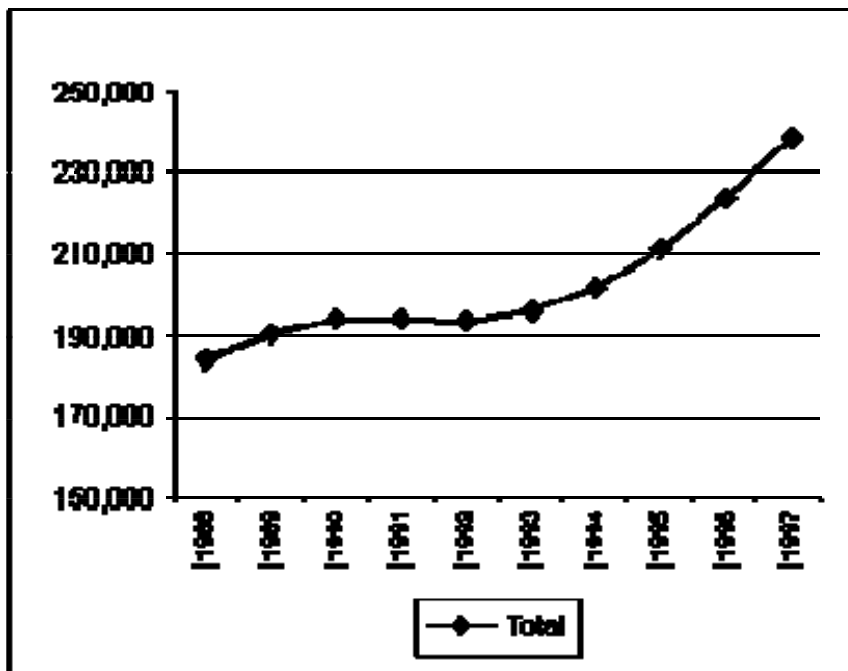
The Irish economy again experienced record growth in 1997. In the Budget estimates for 1998, the Department of Finance estimated that real GNP growth of 7.7% was achieved in 1997. Despite rapid economic growth, inflation was held to an annualised rate of 1.6% up to the end of November 1997, compared to the EU forecast average of 2.2%.

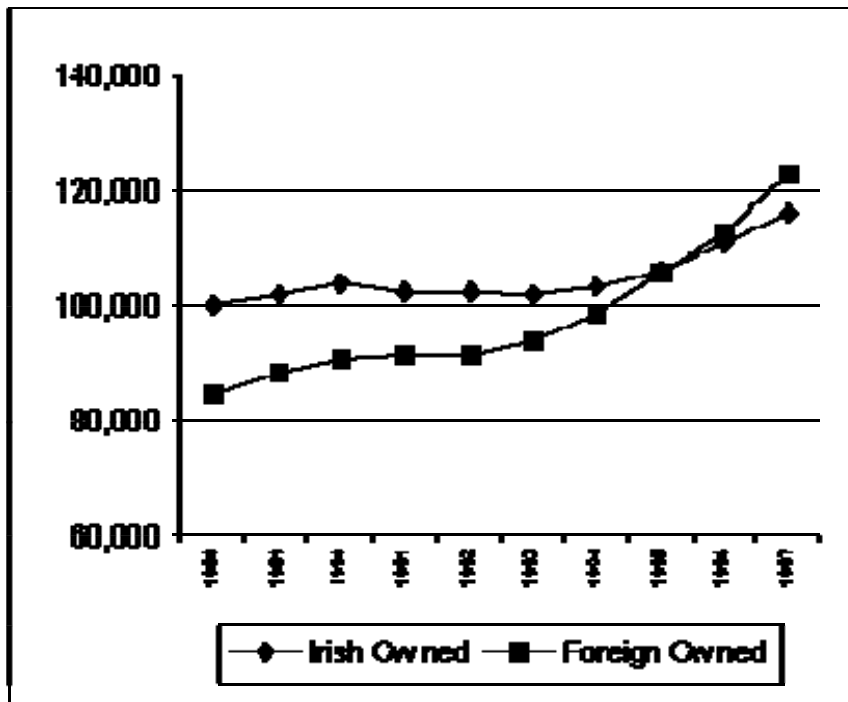
Overall, employment increased by 52,000 in 1997, according to the Budget 1998: Statistics & Tables. Unemployment continued to decline and fell from 11.9% in 1996 to 10.2% in 1997. Perhaps the most encouraging aspect of this decline in unemployment has been the significant reduction in long-term unemployment. The numbers of long-term unemployed fell from 102,300 in the year ending April 1996 to 86,300 in the year ending April 1997 - a decline of 16%.

Preliminary results from the Annual Employment Survey carried out by Forfás shows that full time employment in IDA Ireland and Forbairt backed companies rose by over 15,000 (6.8%) in 1997, bringing the total employed in these companies to 239,000. The trends are shown in Chart 1 below.

Job gains in permanent full-time employment amounted to over 28,000 in 1997, of which almost 24,000 were new first time jobs, the fourth successive year of record growth. Irish-owned companies accounted for just over 12,500 of the total job gains, the highest level on record. The net change in employment of over 5,500 is also the highest level on record. This represents an excellent turn-around from the period 1991 to 1993 when net job losses of 600 per year on average were being recorded. International and financial traded services show the biggest percentage gains, increasing by 26% in 1997. Job losses were just over 13,000, continuing the downward trend of recent years.

**Chart 1: Trends in Permanent Full-Time Employment 1988-1997
Manufacturing & Internationally Traded Services**

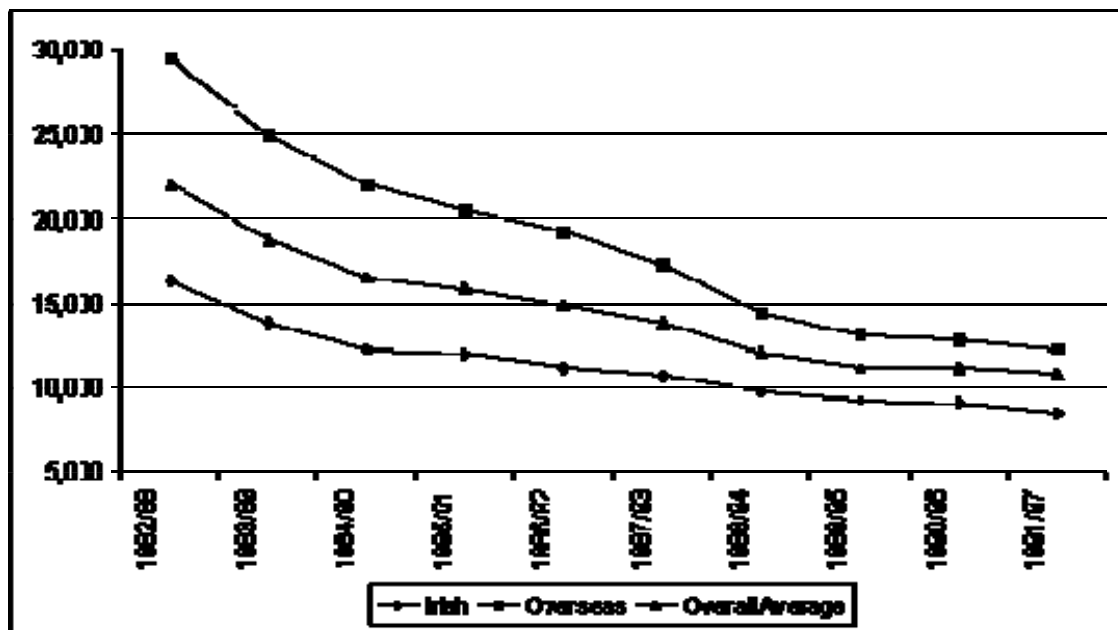




Source: Forfás Annual Employment Survey

The average cost of each job sustained over a seven year period for IDA Ireland and Forbairt backed companies continued the downward trend of recent years and fell from £11,100 in 1996, to £10,700 in 1997. The trend is shown in Chart 2 below. This reflects the improved value for money approach pursued, the overall improvement in the economic environment for employment growth and the growth in internationally traded services projects, where the investment costs are lower than in manufacturing projects.

Chart 2: Trends in Cost Per Job Sustained
(at 1997 Prices)



Source: Forfás Annual Employment Survey

£3.3 Billion Spending Increase by Manufacturing and Internationally-Trading Firms Within Irish Economy

Firms in manufacturing and internationally traded services have also continued to increase their spending in the Irish economy to further boost indirect employment growth. The latest Forfás Irish Economy Expenditure (IEE) Survey shows that manufacturing and internationally traded services companies spent around IR£22.8bn in the economy in 1996, up £3.3bn (17.2%) on 1995 in real terms. This is the highest increase in IEEs recorded to date, and follows a 12.5% rise in spending in 1995.

This spending is a significant factor underpinning the overall growth in the economy and confirms the very strong contribution, by both Irish and foreign owned firms in the internationally traded sector, to growth and employment creation.

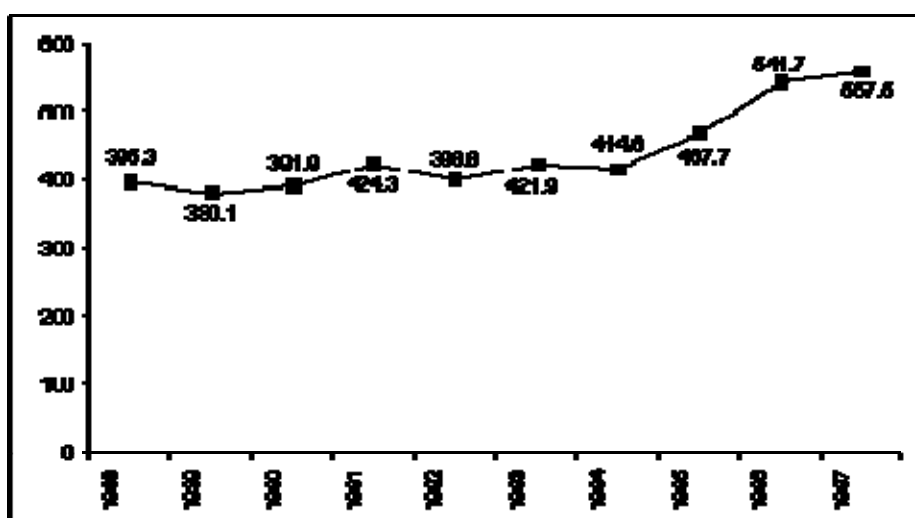
Irish-owned manufacturing companies surveyed exported 44.1% of their sales in 1996, compared with 38.8% in 1992.

Increased Investment by the State on Enterprise Development

Forfás has undertaken an analysis of State investment to promote the development of the enterprise sector and create employment in Ireland. This indicates that:

- The cost of State support to the enterprise sector in the form of direct expenditure (all costs of operating the development agencies, grants etc) was approximately £542m in 1996, and is estimated at £558m for 1997. This represents a rise of 41% in real terms (4.4% per annum) over the period 1988-1997.
- Over the period 1988 to 1996, direct expenditure on the promotion of the enterprise sector increased by 37% in real terms compared with growth in Government expenditure of 30%. The growth in GNP in real terms over the same period was 46%.
- There has been a swing from fixed asset supports (capital grants etc.) to other forms of support such as employment grants, R&D, equity investment etc. In 1988 fixed asset grants accounted for 46.5% of total direct expenditure. By 1996 the percentage had fallen to 39.5%.

Chart 3: State Expenditure on Enterprise Development
(Constant Prices £M)



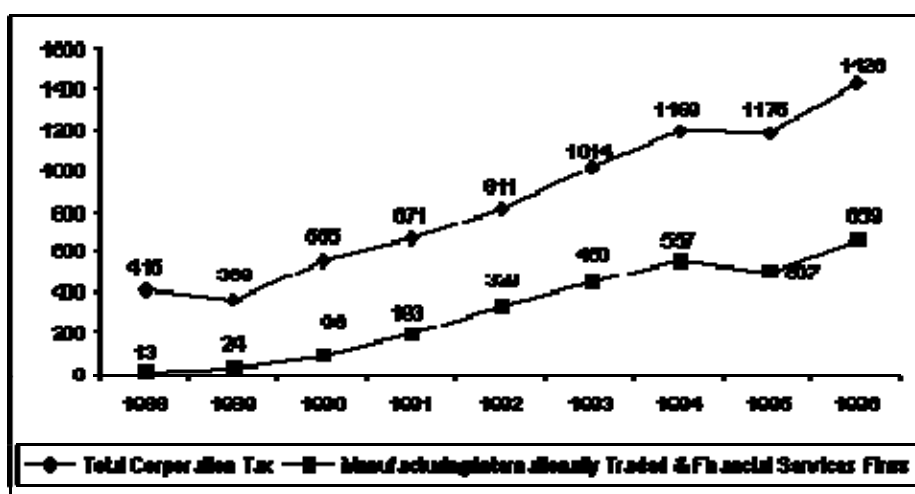
Source: Forfás Irish Economy Expenditures Survey

Continuing Substantial Rise in Corporation Tax Payments

The cost to the State of fostering the development of enterprise has been offset by the rise in corporation tax payments, and in particular from corporation tax paid at the low (10%) rate by manufacturing and internationally traded / financial services firms.

- The total corporation tax take amounted to an estimated £1,699m¹ in 1997. This represents a rise of 300% in real terms in the period 1988-1997 (11.7% per annum).
- Corporation tax paid at the 10% rate by manufacturing and internationally traded services companies according to a survey by Forfás amounted to £659m in 1996, or over 46% of total corporation tax receipts.

Chart 4: Corporation Tax Payments
(Constant Prices £M)



Source: Forfás Corporation Tax Survey

Indigenous and Foreign-Owned Companies on an Innovation Par

A Forfás survey of product and process innovation in Irish industry between 1993 and 1995 developed a profile of Ireland's industrial base using a "scale of innovativeness". Of the 3,500 manufacturing and internationally-traded services companies in the survey less than 500 (or 14%) appear at the top of the scale with an expenditure of at least £100,000 per year on R&D on a continuous basis over a number of years. The remainder of the industrial base is divided into groups with varying degrees of commitment to innovation. There is a complete absence of any element of product or process innovation or any investment in R&D during the period 1993 – 1995 for 30% of companies positioned at the bottom of the scale. A significant finding from the analysis is that indigenous enterprises are as likely to be engaged in innovative activity as their foreign-owned counterparts where comparisons are made between companies of similar size and operating in similar sectors.

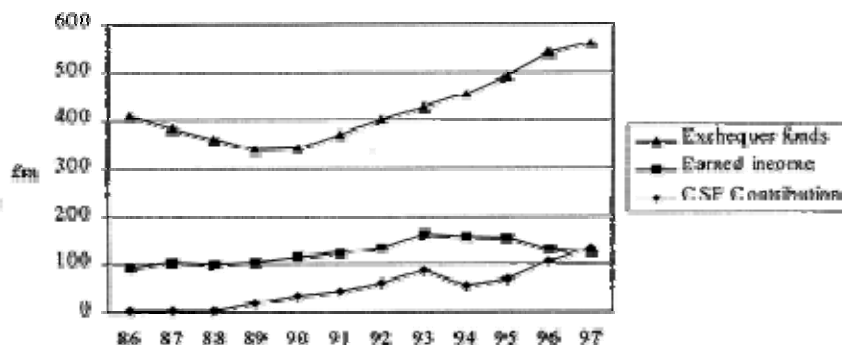
Increase in State Investment in Science and Technology

The Forfás report on "State Investment in Science and Technology 1997" shows the total Government allocations to science and technology activities in 1997 at around £820m, an increase of £43m. (or 5.6%) over 1996. The exchequer component of this total spend amounted to £560m, an increase of £20m on the 1996 level. The contribution of the EU's Community Support Framework to public sector science and technology continues to

¹ Source: End of Year Exchequer Returns

increase, rising to £133m in 1997 from £106m in 1996. At this level EU support represents 16% of the total expenditure.

Chart 5: Distribution of Government Supported S&T by Sources of Funds
1997 Prices £M



Source: Forfás Survey - State Investment in Science & Technology

Significant New £250 Million Scientific and Technological Education (Investment) Fund

The Government decision to establish a £250M Scientific and Technological Education (Investment) Fund is an important new initiative to develop Ireland’s educational infrastructure. This infrastructure must be capable of ensuring increased investment in top-class educational facilities as an appropriate objective of social and cultural development in Ireland. But such investment is also, increasingly, an important source of competitive advantage in developing the companies that will underpin the creation of increased employment opportunities and living standards in Ireland. It is essential to ensure that our people continue to have the skills necessary to take up employment in the high technology industries, not only in the international companies, but also in the increasing number of indigenous companies which are developing in the high technology sectors. Many of the proposals made by Forfás - in [Shaping Our Future: A Strategy for Ireland in the 21st Century](#), in the work of the Forfás Skills Group established to identify the appropriate response to emerging skill shortages and which reported in 1997 and in the report of the Information Society Steering Committee, [Information Society Ireland: Strategy for Action](#), also published by Forfás in 1997 - are provided for in the Fund.

Major Issues for 1998.

Ireland enters 1998 in the strongest economic position the country has enjoyed for many years. The fruits of agreements between the social partners over the past decade on pay, taxation and other social and economic policy issues, the increasing discipline adopted towards public spending by successive governments and the sustained investment in social and economic infrastructure have placed Ireland among the best performing economies in Europe.

However, Ireland will face significant challenges in 1998 on which progress must be made if the country is to sustain economic growth and remain competitive in international markets. The areas that will have a major impact on our future economic performance will include the following:

EMU: Major Opportunities and Challenges.

A decision will be made in May 1998 on which countries will participate in the first phase of Economic and Monetary Union. Ireland is expected to be among this first group of countries, and thus to participate in one of the most significant developments in the world economy in modern times. The component currencies will disappear and be replaced by the euro on 1 January 1999, with the notes and coins following on 1 January 2002.

EMU will represent, above all, a fundamental change in the competitive environment faced by Irish business. Competition will increase at the same time as new business opportunities arise. The possibilities for Irish firms to do business in the markets of other EMU countries will be enhanced through a reduction in transaction costs and through market transparency. At the same time, the potential benefits of EMU will be equally available to firms in other participating countries. Each firm will require to undertake a careful analysis of these opportunities and threats within its own particular business environment and to develop appropriate strategies. These analyses must be carried out before the detailed functional changes required in the internal operations of a company can be determined.

In the EMU Business Awareness Campaign, Forfás has worked closely with representatives of business, Government Departments, the Central Bank and State agencies to develop and keep updated a comprehensive 'information pack' on EMU for the business sector and to disseminate this information widely to the sector. The 'information pack' includes easy-to-follow guidelines on the steps which firms should take to prepare effectively for EMU. Forfás will further strengthen this information campaign in 1998 as part of the Government's overall information campaign.

Competitiveness

Competitiveness is today an issue for countries, as much as for companies. Governments are increasingly concerned that the economic conditions they influence and institutions that they provide should enable their enterprise sectors to compete effectively in the world economy. Globalisation has intensified the competition faced by Ireland both in trade and for foreign investment. The advent of EMU will further underline the necessity for improved competitiveness in the Irish economy. The reduction in policy options in macro-economic terms will heighten the importance of factors such as skills, costs, infrastructure and quality in determining the success of Irish enterprise in the face of competition abroad and on the domestic market.

The National Competitiveness Council established in 1997, with research and secretariat support from Forfás, is finalising a summary statement which will provide an overview of competitiveness; the issues for Ireland, the role of the Council and the key actions that need to be taken in critical areas.

As a result of its review of competitiveness issues for Ireland, the National Competitiveness Council has determined that the priorities for further examination are as follows:

- Skills
- Costs
- The Information Society
- Telecommunications

The work of the Council in 1998 will be based upon the above themes, with a development of them in three dimensions, as they affect foreign direct investment, Irish-owned industries, and the services sector. Cross-sectoral influences on competitiveness will also be examined to establish their impact on the three main groups of enterprises, in order to devise policy conclusions and recommendations.

Science, Technology and Innovation

A major challenge facing Ireland is to cope with the scientific and technological change that is taking place on a global basis. The speed of this change is a major challenge to all countries, requiring them to enhance the scientific and technological competence of their people if they are to remain competitive in the global market.

Currently many national initiatives to promote the development of science and technology are supported by Structural Funds, with the current round being concluded in 1999. In 1998, Forfas will assess national needs and propose appropriate strategies, to the Government, for the post-1999 period.

Ireland's economic and social development depends to a significant degree on the ability of citizens to make informed decisions about everyday matters such as the foods they consume, the medical treatments they undergo, the equipment and processes they use and their impact on the environment. Hence while literacy and numeracy are both key success factors in life, in the next century, informed citizens will also need to be scientifically and technologically literate. There is a need for Ireland to further develop the educational system particularly at primary and secondary school levels.

The pace of technological change presents a particular challenge to Ireland where there has been a lack of awareness of the role of science and technology in economic development. This has led, for example, to the emergence of potential skill shortages in technological areas such as computer software and hardware engineers and technicians.

The Irish Council for Science, Technology and Innovation, ICSTI, established in 1997 under the Forfás legislation, has set up Task Forces to focus on three key areas and report in 1998.

- **Public Expenditure on Science and Technology** - to develop recommendations on prioritisation and allocation of public monies for STI in the context of the new Government Inter-Departmental Committee on science and technology spending.
- **Technology Foresight** - to prepare a Technology Foresight exercise aimed at matching science and technology to future industry and societal needs. In the selected sectors, specific recommendations will be made in relation to public and private investment in STI.
- **Innovation Infrastructure** - to develop a set of coherent policies for the promotion of industrial innovation, for the development of a high quality public sector STI infrastructure, for the development of science teaching in primary and secondary schools and in relation to the development of a vibrant science, technology and innovation culture.

Skills

Skills are the key to increasing international competitiveness. The availability of skilled labour at graduate and technician level and the adaptability and commitment of employees at all levels have been key factors in attracting and developing industry in recent years.

The rapid global growth in the demand for information technology has generated both major business opportunities and huge growth in demand for IT skilled people. Ireland has attracted more than its share of IT business opportunities and consequently has seen major growth in demand for IT and related skills. There is a growing skills shortage in competing countries, such as the USA and the Netherlands.

Since 1995, the growth in employment in Ireland of 3.9 per cent annual average has led to a tightening of the labour market. Throughout the economy, companies are having to work much harder to get skilled people. They also need to continually upgrade and train their staff – 30 per cent of companies in Ireland point to a skills gap amongst their current workforces.

Critical actions have to take place in 1998. These include the implementation of the Government Action Plan for Skills which involves extra places in education for software, electronics and telesales skills and utilisation of the £250M Scientific and Technological Education (Investment) Fund in a way which maximises the impact of skill levels.

Forfás will be involved in the detailed identification of specific skill needs and the development of further policy proposals to address them.

Telecommunications

The revolution that is transforming the global economy is driven by information and communication technologies.

Broadband telecommunications enables intensive transmission of data, pictures and voice communications and allows businesses to work with their customers and each other in totally new and flexible ways and with much less regard to physical distance than in the past. It represents a major opportunity for Ireland to overcome historic difficulties of peripherality.

Broadband services are not yet available in Ireland at the advanced level and competitive prices already available in major competing countries. The mid-1997 liberalisation of telecommunications infrastructure - allowing competitors to Telecom Eireann to offer broadband services - has been a critical step to improving broadband access.

A pro-competitive regulatory framework is a pre-requisite to encouraging this investment, with the establishment of the Office of the Director of Telecommunication Regulation providing an important first step. The powers of the Director of Telecommunication Regulation, however, need to be extended beyond licensing to include promoting competition, guarding against anti-competitive practices in the market and protecting the interests of business customers. In particular, the Director needs to have responsibility for overseeing the terms of interconnection between infrastructure providers, for regulating and monitoring of prices of telecoms services, including the price cap mechanism. The Director also should be given enhanced powers of enforcement.

Forfás Activities in 1997

In 1997 Forfás developed policy recommendations on a wide range of economic issues impacting on the development of industry in Ireland. It also worked closely with bodies established by Government to consider specific issues critical to economic performance, growth and job creation including the National Competitiveness Council, the Irish Council for Science, Technology and Innovation, the Expert Group on Future Skills and the Information Society Commission.

Follow-Up on "Shaping Our Future: A Strategy for Enterprise in Ireland in the 21st Century"

The medium term strategy for promoting the development of the enterprise sector 'Shaping Our Future', published in May 1996, has had broad acceptance. During 1997 Forfás has worked to help secure implementation of the main recommendations of the strategy including, in particular, the recommendations relating to finance, tax, science and technology, skills and education and telecoms.

Overall, 40% of the main proposals have been all or mostly implemented; 40% have been partly implemented; and 20% have had little or no progress made on implementation.

Success has been recorded on issues, such as:

- the establishment of the National Competitiveness Council
- the setting up of the Science, Technology and Innovation Council
- the adoption of a strategy for developing an Information Society
- the proposal for a single rate of Corporation Taxation
- the publication of the Services Strategy, which places services alongside manufacturing at the heart of enterprise strategy; and
- the establishment of a National Transport and Logistics Institute.

Some of the outstanding issues include:

- Skills: ongoing action is needed to ensure the supply of the required level of skills, by the educational and training institutions and by the business sector itself;
- Personal taxation: while major advances have been made in recent years, further reform of the taxation and public finance system is essential;
- Telecommunications; while some advances have been made on the liberalisation of the telecoms market, this needs to go further and more quickly. Investment in broadband in advance of demand to stimulate increased investment and jobs in the information and communications-based sectors requires to be more strongly promoted;
- Finance: further development is needed to address the financing needs of high-growth companies, especially those with capital requirements of less than £500,000, and those in high technology sectors;
- Long-term unemployment: with over 80,000 people still remaining unemployed for one year or more, this issue remains one that requires substantial policy attention.

EMU: The EMU Business Awareness Campaign

In response to the challenges of EMU membership, Forfás strongly developed the EMU Business Awareness Campaign, which it had been asked by the Government to initiate in December 1996. Central to this has been a range of comprehensive, user-friendly information material that the Campaign has produced. This includes the Campaign's Information Pack, of which over 27,000 copies have been distributed to date and a bi-monthly newsletter which is distributed to 20,000 businesses with an additional 15,000 circulated with the Forbairt magazine, Enterprise & Innovation. Information was also disseminated through meetings and

seminars, on the Campaign's website and, more recently, through radio and newspaper advertising, as well as a direct mail to small businesses, conducted with the cooperation of the Revenue Commissioners. Working groups were established to deal with technical aspects of the changeover to in the area of information technology, training and the retail sector.

A major event was the holding of a National Conference in Dublin Castle on 21 April 1997. Entitled *'The euro and Business: Preparing for Action'*, the conference brought together a distinguished group of speakers, including the Minister for Finance, Mr Ruairi Quinn, T.D., Mr Peter Sutherland, Chairman, Goldman Sachs International and Mr Pádraig Flynn, EU Commissioner, under the chairmanship of the Minister for Enterprise & Employment, Mr Richard Bruton, T.D. and the Minister for Tourism & Trade, Mr Enda Kenny, T.D.. Over two hundred participants from business and the public service participated. The Conference saw the launch of the business planning tools prepared in the Campaign to help enterprises in their preparations for the changeover. It was also the occasion of significant announcements by the banking sector and the Revenue Commissioners as to the arrangements they will put in place to deal with transactions in the new currency.

In relation to the implications for Irish industry of the UK remaining outside EMU for the present, a study was undertaken within the Campaign in order to determine appropriate strategies for groups of enterprises particularly sensitive to fluctuations in the sterling/euro exchange rate. The study will provide additional material for inclusion in the EMU Business Awareness Campaign Information Pack.

Competitiveness

A very significant development in Ireland in 1997 was the establishment of the National Competitiveness Council by the Government in response to a commitment in "Partnership 2000". The Council reports to the Taoiseach and is charged with identifying the main competitive challenges facing the enterprise sector over the medium term and the required policy responses.

Forfás provides the research support and Secretariat to the National Competitiveness Council and in that capacity has completed a major overview of Ireland's competitiveness internationally on behalf of the Council. This has drawn on a large statistical base and has reviewed policy issues in all areas of competitiveness. As inputs to the work of the Council, Forfás has also reviewed key issues in competitiveness and identified future challenges, analysed EU competitiveness work, and initiated country studies in competitiveness policy.

Forfás is also carrying out other work related to competitiveness, in particular by participating in EU benchmarking activities. Four pilot benchmarking programmes have been initiated at EU level. These are in logistics, skills, the financing of innovation, and information and communications technologies and organisational change.

Establishment of the Irish Council for Science, Technology & Innovation (ICSTI)

A major step forward in 1997 was the setting up of the Irish Council for Science Technology and Innovation (ICSTI) under the Forfás legislation (Industrial Development Act 1993) to advise Government on the strategic direction of science and technology policy. The mandate of the Council covers a wide area including prioritisation of State spending on science and technology, scientific research, education, technology and R&D in enterprises, financing of innovation, public awareness of science and technology. Forfás provides the research and secretariat support for the Council.

In its first formal advice in September 1997 to Government, ICSTI called for a radical change in the funding of science and technology to enable Ireland to develop its position in an era where excellence and technology are key factors for economic and social development. ICSTI believes that Ireland should move towards a priority-driven system of science and technology investment.

The Council pointed out that a modern economy needs a scientifically literate and innovative population and that Ireland must aim to raise the performance of Irish schoolchildren into the top ten countries in the world in science and mathematics.

The Council therefore welcomed the Government commitment to the development of the STI infrastructure as demonstrated by the setting up of the £250 million Scientific and Technological Education (Investment) Fund. It endorsed the Government's confidence that Ireland, by investing now can build a new wave of creativity and prosperity on the back of new technologies. The Fund will address a number of the key priorities put forward by ICSTI in its advice to Government.

Skills

The response to the growing demand for skills has been substantial. Companies have put more effort and resources into both recruitment and training. The Interim Skills Group chaired by Forfás developed proposals for additional places which led to the Government Action Plan for Skills and an extra 3,200 places in third level education. The Skills Group has managed a Skills Awareness Programme, involving media briefings, developing and issuing of brochures to all school leavers on the areas where job opportunities are available and the development of videos. The Skills Group also developed with the ESRI an approach to the identification of medium term skills needs. This involves a company survey, analysis of graduate supply and sectoral studies.

The work of the Group formed an important input into the decision of the Government to establish the £250 Million Scientific and Technological Education (Investment) Fund which has three main objectives:

- To renew and modernise the infrastructure of third level institutions particularly in the technological sector;
- To develop new areas of activities where emerging skills needs have been identified;
- Invest in promoting innovation to maintain and further our economic growth.

The Government also announced an Education-Business Partnership which involves:

- An Expert Group on Future Skills;
- A high-level Management Implementation Group;
- A Business / Education Partnership Forum.

The role of the Expert Group on Future Skills, which operates under the aegis of Forfás, is to:

- Identify, in a systematic way, the skill needs of different sectors and advise on the action needed to address them;
- Develop forecasting techniques that will assist in anticipating the future skills needs and requirements of the economy and the associated resource requirements;
- Advise on the promotion of education / continuous training/business links at national and local levels;
- Advise on how to improve awareness among job seekers / school leavers of sectors where there are demands for skills, the qualifications required and how they can be obtained, and;
- Consider strategic issues in developing partnerships between business, education/ continuous training sectors in meeting skills needs of business.

Telecommunications

Faced with global competition the strategic use of information and communications technologies and broadband telecommunications is critical to the ability of enterprises to gain and sustain competitive advantage. In "Shaping Our Future" Forfás advocated that an

accelerated investment in broadband infrastructure in Ireland, in advance of demand is required if Ireland is to provide advanced telecom services at the advanced level and at the competitive prices already available in competing countries.

During 1997 Forfás worked with the development agencies and government departments to determine the required level of investment and how that investment could be secured.

The work undertaken concluded that the most effective way to achieve an accelerated increase in investment in broadband infrastructure and services is through a pro-competitive regulatory framework, encouraging competition and implementing policies aimed at accelerating both investment in and use of broadband services.

Forfás also quantified the investment needs in respect of broadband to meet the requirements of the enterprise sector, across the country. Although there is a significant level of broadband investment planned over the short to medium term, there is a need to ensure that disparities in broadband provision do not emerge between peripheral and core locations. There is a strong case for a public subsidy for accelerating the provision of broadband in certain areas across the country where the market may fail to provide the required investment in advance of demand. The use of structural funds requires to be considered in this regard to encourage investment in broadband infrastructure and to encourage the development of Information and Communications Technologies and broadband services.

Business Information System

During 1997, Forfás developed a Business Information System. This is a computer-based information system encompassing a common, comprehensive industrial database of State supported enterprise. It draws together data from Forfás, IDA Ireland, Forbairt, Shannon Development, Údarás na Gaeltachta, An Bord Tráchtála, An Bord Bia, FÁS and the Central Statistics Office. It will enhance the analytical capabilities of participants and facilitate robust analysis and evaluation of enterprise support measures by the Agencies and Departments contributing to enterprise development.

The new Business Information System will be managed and administered by Forfás and make standard information available to all participating agencies. This major system is now developed, undergoing acceptance tests and scheduled for full release early in 1998.

In the longer term, the system will provide a comprehensive source of accurate information and allow management across agencies and Departments to undertake detailed analyses to an extent not possible previously. It will help rationalise data collection from Agency clients and will provide comprehensive data for policy analysis.

Information Society Ireland

In the modern world, economic success is not simply a question of access to natural resources, the size of domestic markets or the capital base. Increasingly, relative access to and skill in using information separate the leaders and laggards. The Information Society is the social and work environment of the future.

An Information Society Steering Committee was established by the Minister for Enterprise & Employment under the aegis of Forfás in 1996 to develop a strategy for the emerging Information Society evolving around new developments in information and communications technologies.

The report of the Committee: Information Society Ireland: A Strategy for Action was published by Forfás in March 1997 and launched by the Taoiseach and the Ministers for Enterprise & Employment, Education, Finance, Science & Technology and Transport, Energy & Communications.

As part of the Government response to the Report, an Information Society Commission was established under the auspices of the Department of the Taoiseach. The Commission will spearhead the implementation of the national strategy to ensure that the benefits of the Information Society are spread throughout society and not just limited to those who can afford to purchase the technology themselves.

Forfas continues to provide ongoing technical and strategic advice to the new Commission as a member of a number of its working groups as it oversees Ireland's preparations for the Information Society.

Digital Park

Arising from the report of the Information Society Steering Committee, Forfás was requested by the Minister for Enterprise & Employment to consider the feasibility and, if feasible, to develop proposals for the establishment of a Digital Park for projects which rely heavily on telecommunications and information technology. The work carried out during the year concluded that Ireland is relatively well positioned to capitalise on the opportunities presented by the emerging digital industries. Detailed recommendations have been made on how the project should best be developed.

Services

In March 1997, the Minister for Enterprise and Employment launched the Government's strategy document for growing employment and stimulating enterprise in the services sector over the next four years: 'A Government Strategy for Services - Employment Initiatives through the Millennium'. The strategy was developed by the Minister and his Department in close consultation with Forfás. It outlines the principles adopted by Government for the development of the services sector and sets out targets and commitments for development. Under the strategy, Forfás has been assigned the role of co-ordinating and reporting on implementation.

The first Forfás report on the Implementation of the Services Strategy was presented to the Tanaiste in December 1997. The Report shows that good initial progress has been made and identifies priorities for further action in 1998.

Forfás has also established a Services Development Advisory Group including representatives from the business sector and State bodies to help guide its work in this area.

National Institute of Transport and Logistics

'Shaping Our Future' identified logistics as a major area of functional importance in the development of the enterprise sector. It proposed the establishment of a National Institute of Transport and Logistics as a resource to provide industry with commercially relevant, high quality education, training and research facilities in the increasingly critical business function of transport/logistics.

This recommendation has been accepted and Structural Funds of £1 million were allocated for the project. Following an open competition, the new Institute will be established within the Dublin Institute of Technology (DIT). An Advisory Board, including private sector representation, has been established to oversee the operations of the Institute.

Provision of Seed Capital

There has been an increase in the supply of risk capital in the Irish market for investment in the enterprise sector through initiatives such as:

- The provision of venture capital by Irish pension funds.
- The provision of risk capital under the seed and venture capital measure in the current EU Operational Programme (1994-1999), through which a total of £66m will be subscribed jointly by the public and private sectors for investment in smaller emerging firms with good prospects for growth. Some 25% will be invested in the form of seed capital.
- The introduction of the Developing Companies Market (DCM) on the Irish Stock Exchange.

Forfás work, undertaken with Forbairt and the Department of Enterprise, Trade and Employment has identified an equity gap for start-up and emerging firms seeking to raise smaller sums (up to c£100,000 plus) to fund their initial growth and development. This sector is unattractive to most commercial providers because of its high risk nature and the administrative resources involved in assessing small application. Arising from this research an initiative is currently being developed jointly by Forfás/Forbairt and the Department of Enterprise, Trade and Employment, to increase the supply of seed capital significantly to emerging firms with good growth potential. It is expected that this initiative will be implemented in 1998.

Alternative Sources of Investment Finance for Infrastructure

The provision of a high standard of infrastructure is crucial to the continued attraction of new investment and to the development of the existing base of Irish and foreign owned companies operating here.

Given the Government's desire to contain public expenditure and the possibility of some curtailment in the availability of EU structural funds post 1999, Forfás has undertaken work on the scope for alternative sources of finance to fund infrastructural development which would assist the continued growth of Irish industry. The areas of infrastructure involved included the transport system, energy, communications, water, sewage and solid waste disposal, skills investment and aspects of R&D infrastructure. The work undertaken has identified a set of principles of good practice to be followed in seeking private sector finance for infrastructural development. These cover the issue of value for money, better and more efficient service delivery, better risk allocation between the public and private sector, the setting and monitoring of standards of performance and the retention of regulation by the public sector.

Reviews

Forfás carries out a series of reviews of publicly-funded development agency activities and technology programmes, on its own behalf and on behalf of the Department of Enterprise, Trade and Employment and of the Industry Evaluation Unit, which is a part of the EU Structural Funds monitoring process.

The following were reviewed in 1997:

- Industry R&D Initiative ('Measure 1'), which grant-aids business sector R&D projects;
- Applied Research Programme, which provides matching funds to third level colleges for joint R&D projects with industry;
- Basic Research Programme, which provides project funding for fundamental research in third level colleges;
- Forbairt Technology Transfer and Partnerships Programme;
- The Local Employment Services;

- Forbairt's International Services Programme;
- Agencies' Linkages Activities, and;
- Economic Project Appraisal System for the agencies

The findings from the review of 'Measure 1' have already been reflected to a significant extent in the new arrangements which have been put in place in the extension to the initiative which was announced by the Minister for Science and Technology in November 1997. A further £29m is being made available to top-up 'Measure 1' between now and the end of 1999 to bring the total grant-aid expenditure under the initiative to £133 Million over the period 1993 to 1999. The major changes in the revised scheme will include:

- competitive selection for grant applications, with greater emphasis on supporting new R&D performers and on encouraging more co-operation on R&D projects between firms themselves and between firms and third level colleges;
- making public funds go further by a reduction in the available grant rate for projects.

European Union Framework Programme

The Framework Programme is the main EU instrument for promoting research in Science & Technology. It is drawn up by the Union in close co-operation with interested parties from the worlds of science, industry and politics. It lays the basis for a medium to long-term research strategy by defining all the main elements for a period of five years. The Framework Programme provides funding for all the research and technological activities carried out on behalf of the Community in the period in question. The total EU budget available for contract research is £10.64 billion.

Forfás co-ordinates Ireland's 36 national delegates to the 4th Framework Programme (1994-1998) and monitors Ireland's participation in the 18 specific programmes. Latest figures show that almost £100 million in research contracts has been won to date by Irish researchers involving over 300 Irish organisations. Of the £100 million Irish industry has secured over 33%.

The current Framework Programme concludes in 1998. Forfas has provided technical support and policy advice to the Office of Science and Technology throughout 1997 in respect of the EU Commission's proposal for the 5th Framework Programme (1998-2002).

Science, Technology and Innovation Awareness Programme

The second year of the awareness campaign, managed by Forfás, to promote science, technology and innovation (STI) at all levels of society consolidated the work of the previous year. The target audiences are young people and their educators, key decision makers in business and government and the general public. The programme highlights the benefits to Ireland that can accrue from STI, introduces people of all ages to exciting developments in science, technology and engineering and encourages learning through enthusiastic participation in STI-based activity at home, at work and in school.

The programme is under the guidance of an STI Awareness Panel which includes representatives of the agencies, the Office of Science and Technology and an independent communications advisor.

Sustainable Development

Forfás chaired an Agency Group on Sustainable Development which prepared a report for the Department of Enterprise, Trade and Employment and the Department of the Environment and Local Government setting out a co-ordinated agency response to three reports issued in 1997. These were the Report of the Joint Oireachtas Committee on Sustainable Development; Sustainable Development: A Strategy for Ireland and the Report of the Taskforce on Enterprise and the Environment. The Forfás Group response covers actions

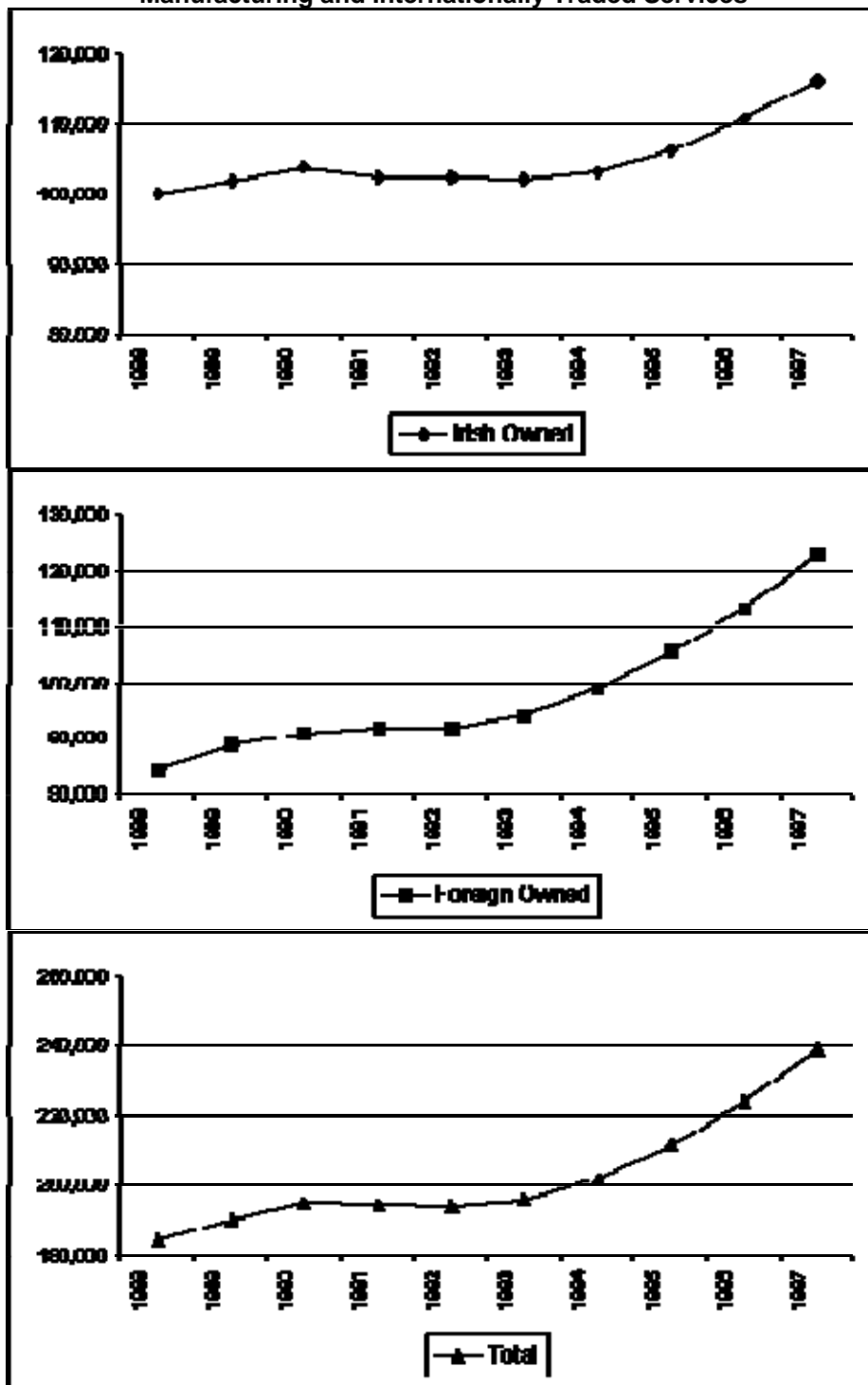
FORFÁS 1997 REVIEW AND 1998 OUTLOOK STATEMENT

common to all the agencies including the development of a strategic plan for the environment technology industry in Ireland, the grant conditions to support the sector and the arrangements for future co-ordination among the agencies in environmental matters.

Appendices

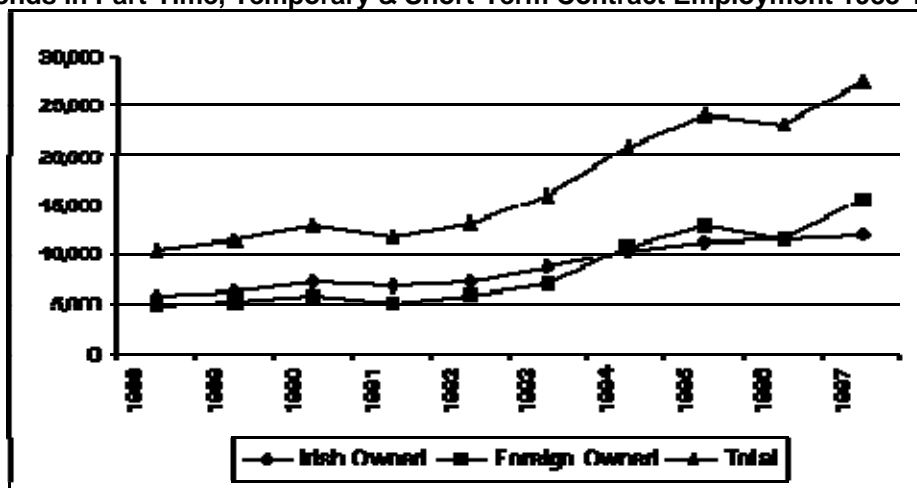
Appendix 1

Trends in Full Time Employment 1988-1997
Manufacturing and Internationally Traded Services

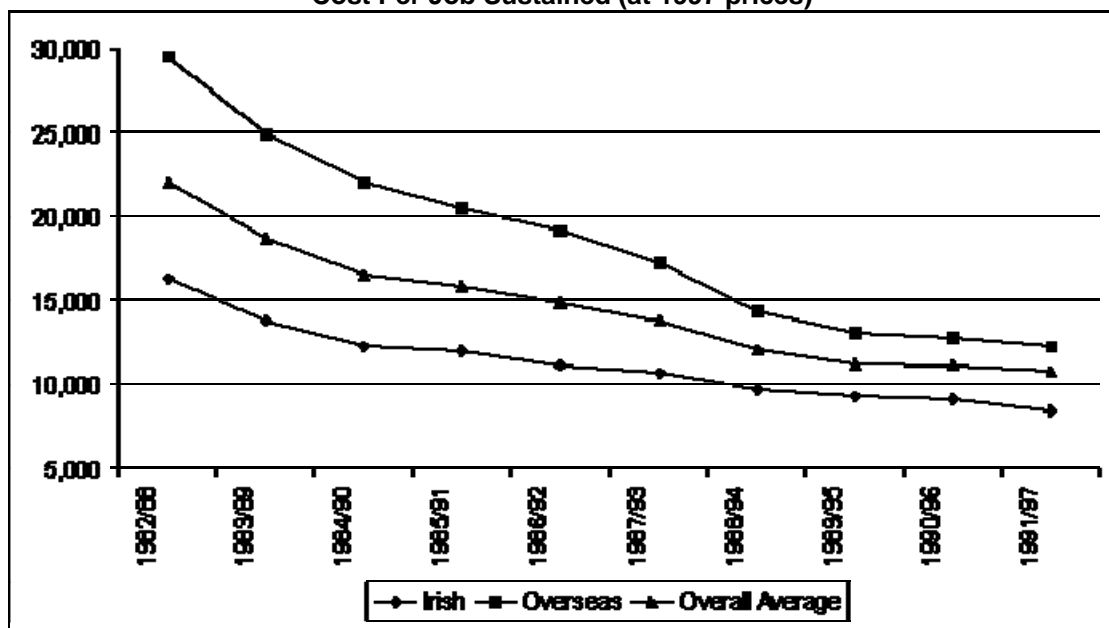


Appendix 2

Trends in Part-Time, Temporary & Short-Term Contract Employment 1988-1997



Appendix 3
Cost Per Job Sustained (at 1997 prices)



**Appendix 4
Irish Economy Expenditures 1995-1996
Manufacturing and Internationally Traded Services
Constant 1996 prices £million**

	1996			% Change Over 1995
	Irish Owned	+ Foreign Owned	= Total	
Total Sales	15,621	26,676	41,299	15.6
Total Irish Economy Expenditures	12,381	10,434	22,815	17.2
Of which Wages & Salaries	2,274	2,493	10,246	16.6
Irish Raw Materials	7,311	2,935	10,246	9.6
Irish Services	1,997	4,540	6,537	27.9
Profits (all Irish industry profits and corporation tax paid by Overseas firms)	799	466	1,265	3.9
IEE % Sales	79.3	40.6	55.2	1.3

Appendix 5
State Investment in Science and Technology - 1997
(Exchequer and EU Funds)

DEPARTMENTS	Total Public Funding £'000	% Total
Taoiseach	457	0.07
Finance	1,476	0.21
Justice	14,502	2.09
Environment	9,192	1.33
Education	310,800	44.89
Marine	13,586	1.96
Arts, Culture & the Gaeltacht	2,756	0.04
Agriculture, Food & Forestry	65,780	9.50
Enterprise, Trade & Employment	86,961	12.56
Transport, Energy & Communication	14,330	2.07
Social Welfare	4,477	0.65
Health	138,331	19.98
Government Offices	29,703	4.29
Total	692,351 *	100.00

* These figures do not include "earned income" (such as fees for technical services) which amount to £127m in 1997. The inclusion of earned income brings the total to £820 Million.

Appendix 6

Distribution of Government supported S&T by sources of funds, 1997 prices, £m.

