

1996 Review and 1997 Outlook Statement

Record Growth in Industrial Jobs - 6% increase.

Another year of strong economic growth was recorded in 1996. GNP growth at 6% was similar to 1994 and 1995 and well above the EU average of 1.75%.

Total employment increased by 45,000 over the year to April according to the 1996 labour force survey. While unemployment is still at an unacceptably high level, it continued to fall from 13.4% of the labour force in 1995 to 12.9% in 1996.

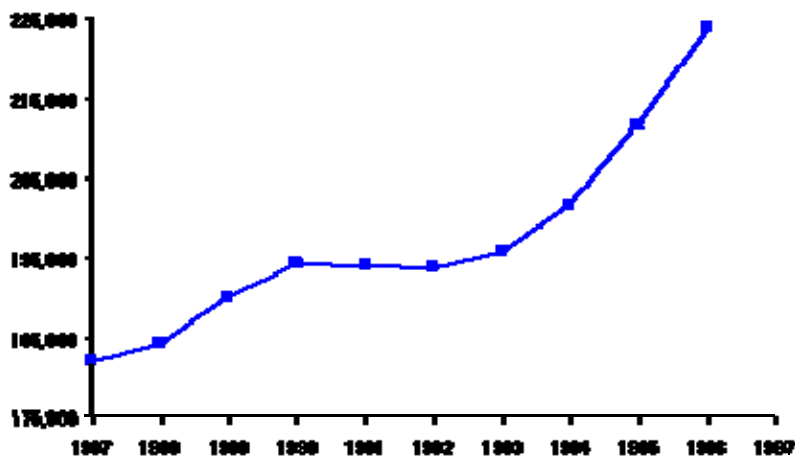
Perhaps the most encouraging aspect of the recent strong growth is that it has, so far, been achieved without widespread inflationary pressures. Inflation in 1996 averaged only 1.6%, compared to the EU average of 2.5%.

Employment Survey

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 around 12,100 (5.7%) in 1996, bringing the total employed to 223,800.

Job gains in Forbairt and IDA Ireland amounted to around 25,300 in 1996, of which 20,700 were new first time jobs, the second year in a row of record growth. Job losses were around 13,200. Continuing the trend of recent years, international and financial traded services are the fastest growing sectors.

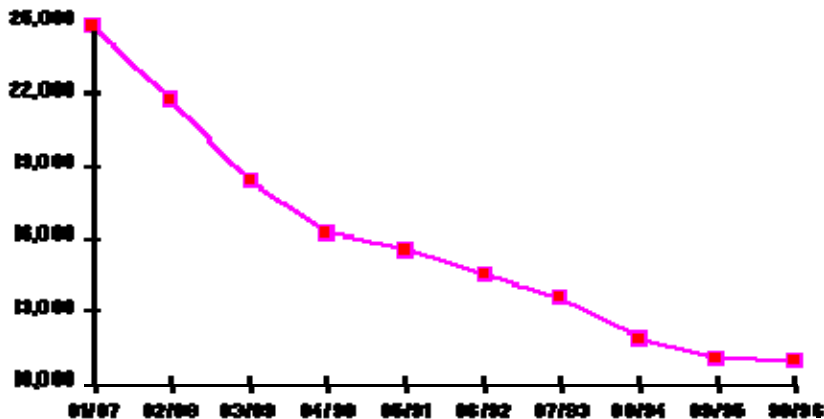
Full time employment 1987-1996.



The average cost of each job sustained over a seven year period for Forbairt and IDA Ireland companies continued the downward trend of recent years and fell from £11,100 in 1995, to £10,900 in 1996. This reflects both the improved value-for-money approach pursued and the growth in international services projects, where the investment costs are lower than in manufacturing projects.

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Cost per job sustained in Forbairt and IDA Ireland at 1996 prices.



£2.1bn. spending increase within Irish Economy.

Industry and internationally traded services also continue to increase their spending in the Irish economy to further boost indirect employment growth. The latest Forfás Irish Economy Expenditure Survey shows that manufacturing and internationally traded services companies spent around IR£19.4bn in the economy in 1995, up £2.1bn (12.5%) on 1994 *in real terms*.

Irish economy expenditure as a proportion of sales fell marginally, mainly reflecting improvements in labour productivity and a lag between rapid increases in the output of industry and the sourcing of supplies in Ireland.

£400 m spent on R&D and Innovation in Enterprises

The regular monitoring undertaken by Forfás of R&D performance within the business sector showed that industry in Ireland spent almost £400m in 1995 on in-house R&D compared to £271m in 1993. This represents a continuation of strong real growth since the beginning of the 1990s. Business sector R&D spend as a percentage of GDP rose to 1% for the first time in 1995, up from 0.84% in 1993. This level of expenditure is comparable to a number of other small European economies, but is still short of the EU average of 1.2% of GDP and the OECD average of 1.5%.

Business Expenditure on Research and Development 1988-95.

Analysis of the growth in R&D activity shows that the annual average growth rate between 1990 and 1995 is twice the rate between 1986 and 1990 indicating that R&D activity underwent a significant step forward at the beginning of the 1990s and this has been sustained.

A particularly important feature of the latest figures is that the annual rate of increase for Irish owned industry (22%) for the two years exceeded that of foreign-owned industry (15%).

EU support boosts State Investment in Science and Technology

The Forfás report on "State Investment in Science & Technology 1996" shows an expenditure of over £780m. on activities broadly defined as science and technology related. The European Community (EU) contribution to this expenditure is c.£89m. or over 11 per cent of the total.

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Government supported S&T by sources of funds, 1996 prices, £m.

Exchequer funding of overall Science & Technology activity grew, in real terms, by 3.1% per annum between 1985 and 1995. The real increase between 1995 and 1996 amounted to 11.3%, reflecting increased exchequer funding in 1996. Fees earned by Government organisations grew by 5.3% per annum between 1985 and 1995, a trend which was reversed in 1996 when earned income showed a decline of 13% in real terms over the 1995 level. This reduction reflected the loss of fee income by the third-level sector as reflected in the figures of the Higher Education Authority (HEA).

Some of the key issues identified in the Report include:

- the need to establish an improved system of co-ordination and prioritisation for the significant expenditures involved through the establishment of new inter-departmental arrangements and the preparation of a National Plan for Science & Technology on an annual basis;
- the need to consider, evaluate and plan for the position which will emerge at the completion of the present Community Support Framework (CSF) in 1999 and under which the EU contribution to Science & Technology expenditure is particularly important in a number of areas, including Enterprise Development (44%) and Natural Resources (23%).

Quality Management Certification: Ireland Among Highest Global Performers.

During 1996 the National Standards Authority of Ireland (NSAI) published over 1,000 Irish Standards, mainly in the form of harmonised European Standards to meet the needs of Irish industry in the EU Single Market. It also put in place 200 new registrations in respect of the international quality management standard, ISO 9000. This brings to over 1,700 the total number of operations registered to ISO 9000 by NSAI. Ireland now ranks third in Europe and fifth in the world in terms of the number of ISO 9000 certificates issued per head of population.

The NSAI also provides registration of environmental management system to the Irish Standard IS 310, which has EU recognition and the new international standard ISO 14001 which was published in September. During the year fourteen companies were registered to these environmental standards - bringing the total number to seventeen.

Legislation to establish NSAI, which is part of Forfás at present, as an independent agency was enacted in July 1996. Arrangements to give operational effect to the legislation are expected to be in place early in 1997.

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Major Issues for 1997

Looking ahead to 1997 Mr Travers says that the sustained high growth and unprecedented levels of employment creation over recent years marks a fundamental shift upwards in the productive and competitive capabilities of the economy. However, it remains vitally important that the success achieved is not taken for granted.

This fundamental improvement is the dividend from a commitment by successive governments to sound policies which have enhanced competitiveness over the last decade within a social and economic strategy agreed with the social partners.

This transformation of the economy provides a unique opportunity to build on the strong foundations now in place to further enhance long term competitiveness and growth potential, to achieve significant improvements in living standards and substantive reductions in the unacceptable levels of unemployment that have dogged the Irish economy for decades.

Any regression in the management of the economy must be avoided by

ruling out actions which translate into unproductive public spending, higher inflation, wage increases or dividend payments that undermine the competitiveness and growth prospects of firms.

The prize within our grasp of long-term, sustainable growth in employment and living standards must not be lost to the *chimera* of short-term gains which undermine future prospects. In this context a number of key challenges will face the Irish economy in 1997 and beyond. These include the following:

EMU: A Changed Landscape for Irish Business: Preparation Essential.

Participation in EMU represents a significant step for the political economy of Ireland. An authoritative study published by the ESRI in mid-1996 indicates that the overall net economic impact under a range of scenarios, including both the participation and the non-participation of the U.K. in EMU, is smaller than many had envisaged. Under a range of the most plausible circumstances the study finds the overall economic impact for Ireland's participation in the EMU is positive. These economic effects flow through 3 main channels: the cost of foreign exchange transactions, the impact on competitiveness and the level of interest rates. The impact of EMU will, however, have a differential effect on different sectors and sub-sectors of the economy. There will be winners and losers. The actions of individual firms will determine into which of these two categories it falls.

It is absolutely essential that every enterprise in the country establishes clearly what EMU will mean for their business and the actions they need to take to deal effectively with it.

Ireland is on course to qualify as one of the first group of countries to join the EMU, which is scheduled to begin on 1 January 1999. EMU will represent a very fundamental change in the economic environment for enterprise. As the expected date for the introduction of the Euro approaches, there are a number of important policy issues to be addressed, as well as implications for enterprise at the strategic and operational level.

The first requirement is for individual enterprises to become aware of the changes that EMU will bring and the issues they will face. As part of a wider Government information campaign on EMU Forfás has been asked by the Minister for Enterprise and Employment to co-ordinate an awareness campaign for Irish business. An "information pack" and a plan for the campaign was launched in December 1996 by the Ministers for Enterprise and Employment, Finance, and Tourism and Trade. A Consultative Committee has been

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established with representatives from major business associations, professional bodies, and government agencies. These organisations will act as the main channels of information ("information multipliers"), on EMU matters to enterprise throughout the country and in gathering feedback from firms on their information requirements. The emphasis of the campaign will be on helping firms to prepare for EMU by ensuring that they have all the information they require to prepare for the significant changes that will come into place.

Competitiveness - The Key to Employment Creation and Prosperity.

Improvements in Ireland's competitiveness across a range of areas in recent years has played a large part in securing the buoyant economy now generating significant increases in employment and living standards. The national programmes negotiated between the social partners have played an important part in securing these improvements

A strong focus on public policies that affect the competitiveness of firms is required to maintain this success. These policies must be developed within a continued commitment to reducing the cost base facing the traded sector of the economy, improving efficiency in the non-traded sectors, enhancing human capital resources and supporting firms in adapting to new technologies and business trends.

In order to facilitate policy decisions which strengthen the competitiveness of the enterprise sector Ireland's competitive position across a wide range of factors requires to be benchmarked against the position in countries against which we compete. Forfás has published a limited analysis of Ireland's competitive position in October 1995. A more comprehensive analysis which will form the basis for regular reviews of Ireland's overall competitiveness position is in preparation.

Services - The Main Source of Future Job Creation.

Ireland is outperforming most countries in the creation of jobs in the manufacturing sector but is lagging behind other European countries in the proportion of services jobs in the economy. The resolution of the unemployment problem in Ireland will, to a great extent, depend on the extent to which the unexploited potential of employment creation in services is realised.

In the "Shaping Our Future" Report, published in the summer of 1996, Forfás outlined a policy approach which would help to achieve the development potential of the services sector. Some of the elements of that strategy included:

- Putting internationally traded and local services alongside manufacturing at the heart of enterprise strategy;
- Achieving an early leadership position in the rapidly expanding telecommunications based services and back office support markets;
- Substantially enhancing foreign language skills of the labour force;
- Reducing the standard rate of corporation tax for services;
- Achieving substantive improvements in telecommunications infrastructure and ensuring fair competition.

Since then Forfás has undertaken further analysis of the services sector which analyse the characteristics of Ireland's services sector relative to other countries. There is also a need for significant improvements in the collection and availability of statistics on the services sector, if the policy analysis required to promote the development of the sector is to be soundly based.

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Information Society: A Major Opportunity for Ireland.

The convergence, diffusion and pervasiveness of information and communications technologies is bringing about a fundamental transformation in economic and social life. The emerging Information Society is one that uses information intensively and in a way that significantly reduces the traditional constraints of time and space. The new technologies mean that transactions between firms and between firms and individual customers are processed electronically and that working and living practices are increasingly dramatically altered. The full adoption of these technologies will be crucial to the competitiveness of the enterprise sector, to Ireland's continued attractiveness as a location for inward investment and to its ability to capitalise on emerging opportunities.

In March 1996, the Minister for Enterprise and Employment announced

the formation of the Information Society Steering Committee,

which brings together representatives of industry, trade unions, telecommunications and relevant Government departments. Forfás is providing the research and secretariat support for the Committee.

The report of the Committee sets out a vision of what Ireland can achieve by effectively embracing the new information technologies as essential instruments of social and economic policy. The report sets out a comprehensive policy framework and set of recommendations to harness the benefits of the new technologies to increase employment and living standards.

Science, Technology and Innovation (STI): A New National Approach.

The first ever Government White Paper on science, technology and innovation was launched on behalf of the Government by the Minister for Commerce, Science and Technology in November 1996. It marks a new beginning in the national approach to science and technology. The White Paper evolved from the work of the Culliton Report, the Science, Technology and Innovation Advisory Council (STIAC) and of the Task Force on the implementation of the STIAC Report chaired by the Chief Executive of Forfás. The White Paper aims to locate science and technology firmly within the framework of wider industrial, economic and national development policies.

A number of decisions in the White Paper were identified for priority action. These include:

- * the establishment of a new interdepartmental committee to ensure a coherent and comprehensive approach to national expenditures on science and technology;
- * the establishment of a Science Council with representatives of industry, universities, research organisations and other interests, to provide strong and objective advice which would contribute to the national science and technology planning process;
- * additional actions by Forbairt to increase the level of technology transfer in industry;
- * an initiative on inter-firm collaboration which would encourage firms to co-operate in strategic activities, such as research and development, and help to overcome disadvantages of small scale;
- * new structures to achieve more effective management of the important Programmes in Advanced Technology;
- * a campaign to increase the level of awareness and greater appreciation of the importance of science, technology and innovation.

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Forfás will have a substantial involvement in the implementation of the decisions set out in the White Paper. The new Science Council will be established by Forfás, in consultation with the Minister for Commerce, Science and Technology. Forfás will manage the awareness campaign on Science and Technology issues and will have an important role in monitoring the implementation of the decisions announced in the White Paper.

Pre-Designated Sites

The physical planning system in Ireland has operated well over many years in providing a comprehensive framework for development and for environmental conservation. It is important in terms of the support it provides to enhancing the quality of life in Ireland which is, increasingly, seen as a source of competitive advantage in the promotion and development of economic activities. An effective and efficient physical planning system is an important part of the support infrastructure for industrial promotion and development.

In that context it is important that the system in place in Ireland is kept under review in comparison with developments in other countries so that Ireland is not placed at any disadvantage in competing for internationally mobile projects against countries which have well-developed physical planning and environmental protection systems. Forfás, in consultation with IDA Ireland and Forbairt, has undertaken such comparisons in 1996. Arising from this review proposals have been made to further streamline the system including the pre-designation of a number of sites for specific industries. These proposals are under consideration at present.

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Other Forfás Activities in 1996

"Shaping Our Future" A Strategy for Enterprise

A major project was completed by Forfás in May 1996 with the publication of its report 'Shaping Our Future: A Strategy for Enterprise in Ireland in the 21st Century'.

This report is the first substantial attempt at the development of a long term strategic framework for the development of the enterprise sector in Ireland. It identifies the key issues and trends that need to be taken into consideration to sustain, in the medium to long term, the recent strong economic performance achieved. It sets out a number of ambitious but realistic objectives for employment creation and output growth and for tackling unemployment, reducing the number of long term unemployed and increasing the standard of living and quality of life of people living in Ireland. Specific policy recommendations are set out for manufacturing and services together with those in a range of critical support areas such as taxation, training and skills, telecommunications, transport, science and technology, regional policy and public sector reform.

Taxation and Finance: The Role of Capital Markets.

As part of ongoing work on the taxation and financial requirements of Irish-owned industry, Forfás and Forbairt jointly undertook a major study on the role of capital markets in meeting the financing needs of Irish industry. The recommendations of the study bring together three major strands of policy involving taxation, the provision of support for firms at the early stage of their development and the promotion of a culture of wider share ownership and willingness to invest in enterprise. Some of the key findings of the report which will be published in 1997 include:

- Creating, through changes in taxation policy, a more level playing field for different savings instruments, and stimulating investment with lower capital taxes.
- Providing more effective access to seed and venture capital and taking initiatives to promote more competitive credit finance to smaller companies through, for example, the establishment of a credit rating agency.
- Providing opportunities for a wider body of private and institutional investors to contribute towards the funding of some State activities.

Telecommunications: Broadband Essential.

Forfás published a major report in 1996 on telecommunications and its importance to enterprise building. This report, prepared by a leading independent telecommunications consultancy, Analysys, looks at the current and likely future trends in technologies and assesses their implications for Ireland.

A critical conclusion is that a broadband communications infrastructure, offering services at competitive prices, requires to be provided ahead of demand and before competing countries if Ireland is to reap the full benefits of the major advances which are taking place in telecommunications technology.

Transport: New National Institute for Transport and Logistics.

Forfás published the report of its Transport and Logistics Group 'World Class to Serve the World' in 1996.

The report, which analyses key trends in the area of distribution and logistics, highlights the need to achieve world class skills and capabilities in the rapidly advancing discipline of systems logistics. It deals with the actions needed to achieve the efficient integration of all

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elements of the supply chain along which firms operate. The report makes a number of recommendations with regard to necessary improvements in infrastructure and services.

Among these recommendations is the need to establish a National Institute for Transport and Logistics. The aim of such an institute would be to give a much needed boost to training, education and research capabilities in the critical area of transport and logistics in Ireland. At the request of the Minister for Enterprise & Employment, work is currently well advanced on getting such an institute established.

Skills: New Initiatives required to address Industry Needs.

In the Information Society which is evolving rapidly in Ireland, as part of a wider global evolution, skills and training offer a crucial source of competitive advantage. During 1996 Forfás, at the request of the Minister for Enterprise & Employment, established a Skills Group to identify existing and emerging skill needs in consultation with other Government agencies and with Government Departments and to formulate action proposals to address the skill shortages identified.

An important part of Science, Technology, & Innovation policy is to ensure that adequate education and training resources and facilities are in place, that skill shortages are minimised and that the demand and supply of qualified manpower are in line to the greatest possible extent. A study undertaken by Forfás and completed in 1996 showed that the proportion of third level students graduating in Science and Engineering has fallen in recent years. This trend has potentially significant consequences for future competitiveness. It is one of the issues that the Skills Group is addressing.

A study of Call Centres by Forfás in 1996 including Telemarketing and Technical Support projects, demonstrated an existing and projected high demand for people with a range of language skills. Urgent action is required, from the education and training system, to provide between 4,000-5,000 people with good skills in a range of languages over the next three years to meet the growth in demand for skills in this sector.

EU Presidency

In recent months, Forfás has worked closely with and supported the Department of Enterprise & Employment in its intensive work during the Irish Presidency of the EU.

In the area of Science & Technology considerable work was undertaken on the Mid-Term Review and Financial Supplement to the Fourth Framework Programme, under which EU funds are provided for co-operative research by organisations in member countries. At the final Research Council the elements of a Common Position were concluded whereby an additional £125m will be provided for research into a number of areas of interest to Ireland including BSE-related diseases, educational multi-media and transport. Under the Fourth Framework Programme, which covers the period 1994-1998, Irish researchers have, to date, received IR£83 million, of which 35% has been awarded to Irish industry.

Important work was undertaken in developing the orientation of the Fifth Framework Programme, which will succeed the Fourth Framework Programme. It will include specific programmes which are important to Ireland ranging from Information Technologies to Agriculture, Health and the Training and Mobility of Researchers.

Forfás also participated in other Irish Presidency initiatives undertaken in the areas of Small and Medium Sized Enterprises (SMEs), Innovation and Illicit Drugs. The latter was one of three overarching themes of the Irish EU Presidency. Conclusions regarding the future participation of SMEs in EU technology programmes and the role of research in the fight against Illicit Drugs were agreed, at the final Research Council.

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Science, Technology and Innovation (STI): A New Awareness Programme.

The ongoing programme of science, technology and innovation awareness activities, managed by Forfás on behalf of the Office of Science and Technology, yielded several significant outputs in 1996:

- the launch of national awards for excellence in industrial innovation;
- the first ever information technology and science week;
- increased coverage of science and technology in the television, radio and printed media;
- activities focused on young people in schools.

Technology Foresight

Technology Foresight exercises are carried out in many countries to identify the best way to maximise the benefits from emerging technologies in specific sectors.

An investigation undertaken by Forfás in 1996 into the benefits for Ireland of conducting such an exercise has yielded proposals for a three year programme of focused interaction with industry, higher education and the public sector. The White Paper on Science and Technology supports the use of technology foresight as a necessary tool in the co-ordination of science and technology actions.

Evaluations of Technology Programmes.

The relevance and importance of evaluating publicly funded programmes is increasingly recognised. The European Commission has been in the forefront in promoting such evaluation and during 1996 it launched a series of mid-term reviews of Operational Programmes, including the Operational Programme for Industry. The findings from those evaluations will determine whether there will be any mid-course corrections to the Community Support Framework between now and 1999.

The Irish authorities carry out their own parallel programme of evaluations aimed at ensuring value for money in relation to public expenditures. Many of those evaluations relate to science and technology activities in which significant amounts of public funds are now invested. During 1996 Forfás, on behalf of the Department of Enterprise and Employment, undertook a number of such evaluations, in consultation with the implementing agencies e.g.:

- two Programmes in Advanced Technology (Power Electronics and Telecommunications)
- Technology Centres in the Regional Technical Colleges
- Measure 6 and Measure 1 (grants for R&D projects in industry).

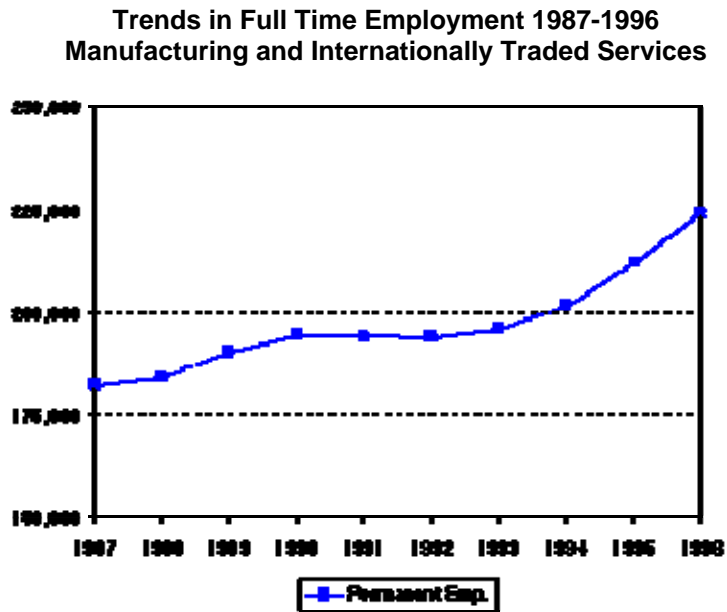
The findings from these evaluations have been generally accepted and a number of them have already been published.

In the case, for example, of Teltec Ireland - the telecommunications Programme in Advanced Technology (PAT) - a significant conclusion is that Teltec is an important national resource for the training of post-graduate students in an area facing critical skills shortages. It is recommended that Teltec continue to devote a significant level of resources to this training function, even at the cost of reducing its overall income-earning potential. The evaluation also recommended greater collaboration between Teltec and Telecom Eireann and this has already started.

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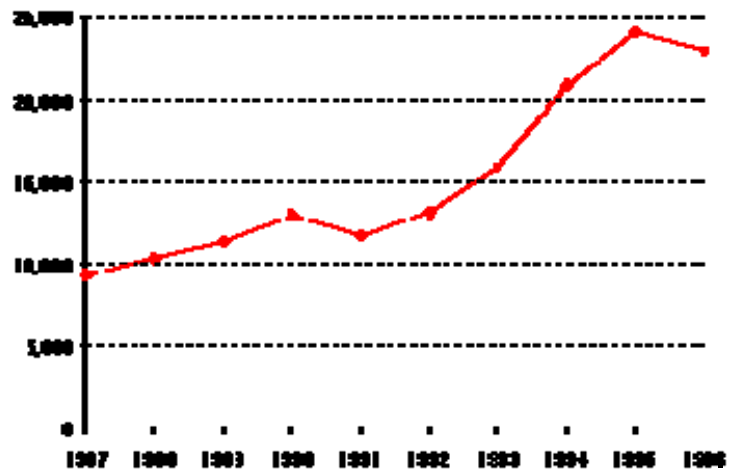
Appendices

Appendix 1



Appendix 2

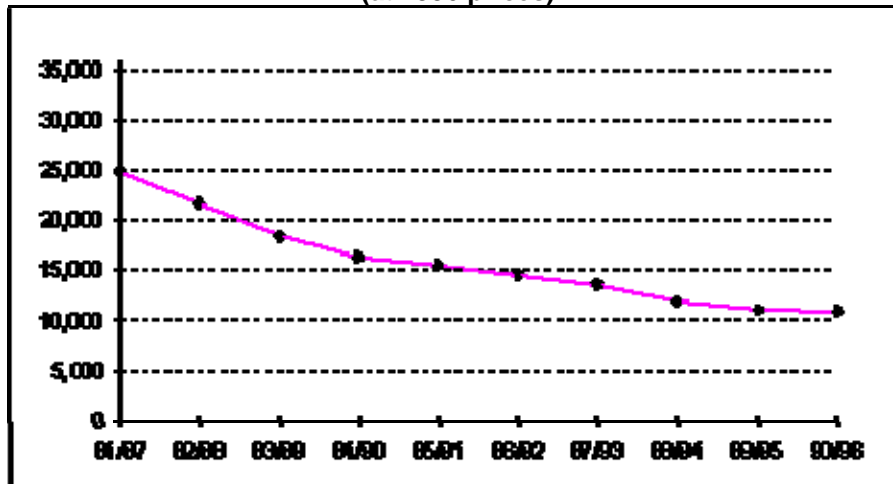
Trends in Part-Time, Temporary & Short-Term Contract Employment 1987-1996



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Appendix 3

**Cost Per Job Sustained Forbairt & IDA Ireland
(at 1996 prices)**



Appendix 4

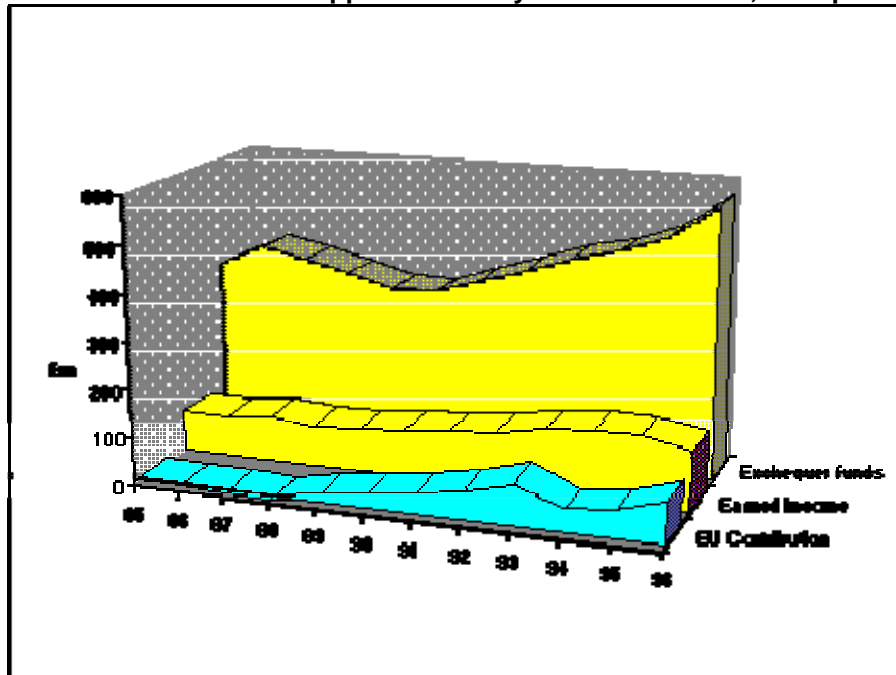
**Irish Economy Expenditures 1994-1995
Manufacturing and Internationally Traded Services
Constant 1995 prices £million**

	1995			% Change over 1994
	Irish Owned	+ Foreign Owned	= TOTAL	
Total Sales	13,709	21,963	35,672	13.8
Total Irish Economy Expenditure	10,889	8,670	19,339	12.5
of which				
Wages & Salaries	2,076	2,259	4,335	4.9
Irish Raw Materials	6,090	2,524	8,614	9.5
Irish Services	1,853	3,515	5,188	25.1
Profits (all Irish Industry profits and corporation tax paid by Overseas firms)	850	372	1,222	15.8
IEE % Sales	77.8	39.5	54.2	-1.1

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Appendix 5

Distribution of Government supported S&T by sources of funds, 1996 prices, £m.



Appendix 6

State Investment in Science and Technology - Exchequer and EU Funds

State Investment in Science & Technology - Exchequer and EU Funds

Departments	Total Public Funding	% Total
Techseach	341	0.05
Finance	3,480	0.53
Justice	13,320	2.48
Environment	3,754	1.48
Education	289,574	43.98
Marine	7,744	1.18
Arts, Culture & Gaeltecht	618	0.09
Enterprise & Employment	80,312	13.71
Transport, Energy & Communications	13,041	2.88
Social Welfare	5,748	0.87
Health	129,218	19.62
Government Offices	35,723	5.42
Total	653,731	100.00