

nesc

National
Economic and
Social Council

An Chomhairle
Náisiúnta Eacnamaíoch
agus Sóisialach

A Review of
**Industrial
Policy**

No. 64 February 1982

Summary

NATIONAL ECONOMIC AND SOCIAL

The Council was established in November 1973.

The Council's main functions are to provide a forum for discussion of the principles relating to the efficient development of the national economy and the achievement of social justice, and to advise the Government, through the Taoiseach on their application.

The membership of the NESC is constituted to make it a representative forum of the principle economic and social interest groups and of independent members. The Council comprises a Chairman, appointed by the Government after consultation with the interest groups,

Ten persons nominated by agricultural organisations,

Ten persons nominated by the Confederation of Irish Industry and the Irish Employers' Confederation,

Ten persons nominated by the Irish Congress of Trade Unions,

Ten other persons appointed by the Government (i.e. independent members), and

Six persons representing Government Departments.

The reports which the Council produces are submitted to Government and, together with any comments which the Government may then make thereon are laid before each House of the Oireachtas and published.

Council reports are available from the Council, the Government Publications Sales Office or through any bookseller.

NATIONAL ECONOMIC AND SOCIAL COUNCIL

A Review of Industrial Policy

SUMMARY OF A REPORT PREPARED BY THE
TELESIS CONSULTANCY GROUP

PUBLISHED BY THE NATIONAL ECONOMIC AND SOCIAL COUNCIL

NATIONAL ECONOMIC AND SOCIAL COUNCIL MEMBERS

Chairman: Dr. N. Whelan

Copies of this Report may be obtained from
THE NATIONAL ECONOMIC AND SOCIAL COUNCIL
Earl Court, Adelaide Rd., Dublin 2,
From the Government Publications Sales Office, or
through any bookseller

Price: £3.00

The full Report is also available

Price £7.00

ISBN 0-907116-23-X

Nominated by the Government

Prof. D. Hannan	Mr. G. A. Meagher	Mr. J. O'Mahony
Mr. D. Condon	Mr. N. Mulcahy	Prof. W. J. L. Ryan
Mr. J. Holloway	Mr. M. Doyle	Mr. J. Simpson
Mr. B. McDonald	Mr. T. Ó Cearbhaill	Senator T. K. Whitaker

Nominated by the Confederation of Irish Industry

Mr. F. A. Casey	Mr. J. McCabe	Mr. C. Power
Mr. L. Connellan	Mr. M. McStay	

Nominated by the Irish Congress of Trade Unions

Mr. P. Cardiff	Mr. R. Rice	Mr. H. O'Sullivan
Mr. J. Carroll	Mr. D. Murphy	Mr. G. Quigley
Mr. J. Hall	Mr. P. Murphy	Mr. R. Roberts
Mr. D. Nevin		

Nominated by the Irish Co-operative Organisation Society

Mr. J. Buttimer	Mr. P. Kelly	Mr. J. McCarrick
-----------------	--------------	------------------

Nominated by the Irish Creamery Milk Suppliers' Association

Mr. P. Hourigan	Mr. C. Dolan	Mr. T. J. O'Callaghan
-----------------	--------------	-----------------------

Nominated by the Irish Employers' Confederation

Mr. J. Walmsley	Dr. E. McCarthy	Mr. J. J. O'Reilly
Mr. J. Jennings	Mr. P. Murphy	

Nominated by the Irish Farmers' Association

Mr. J. Murphy	Mr. P. Dunne	
Mr. D. Cashman	Mr. J. Richards-Orpen	

CONTENTS

SUMMARY*

	<i>Page</i>
PREFACE	5
INTRODUCTION	10
I THE APPROACH	11
II CURRENT STRUCTURE OF IRISH INDUSTRY	15
Ireland's Natural Resource-Based Industry	
Ireland's Indigenously-Owned Industry	
Foreign-Owned Companies in Ireland	
III AN ASSESSMENT OF PRESENT IRISH INDUSTRIAL POLICY FOR THE FUTURE	26
Ireland's Current Industry Policy: Historical Antecedents, Current Intentions, and Overview of Policies and Institutions	
The Cost of Irish Industrial Policy	
Resource Allocation	
The Methods used to Develop Indigenous Industry	
Control of the Industrial Policy Process	
IV RECOMMENDATIONS	34
New Directions for Irish Industrial Policy	

*This summary does not present the detailed evidence and reasoning which was set out in the full report. The summary was drafted by the Council secretariat.

PREFACE*

1. The Council is sponsoring a five-part study of policies for industrial development. A Government statement of 2 December, 1977 stated that appropriate strategies for the expansion of employment in manufacturing industry similar to the Council's review of the agricultural sector, could benefit from examination by the Council.

2. The first of the five parts was a survey of the relevant literature and of policy changes in Irish Industrial policy since the early 1960s. It was undertaken by Mr Eoin O'Malley of the Institute of Development Studies, University of Sussex and is published as Report No. 56 of the Council.

3. The second part was an evaluation of the infrastructural constraints which hamper existing Irish firms and may act as a barrier to the attraction of new industrial projects to Ireland. The focus of the study was on physical infrastructure and it was decided to concentrate on three basic services — roads, telecommunications and water supply. The study was undertaken by Professor Christopher Foster, Mr Jim Dorgan, Mr Stephen Dewar and Dr Nick Segal of Coopers and Lybrand Associates. Their findings are contained in NESC Report 59.

4. The third part was an analysis of the extent and nature of job losses in manufacturing industry. A draft report has been prepared by Mr John Blackwell, Mr Gerard Danaher and Mr Eoin O'Malley.

5. The fourth part was an evaluation of existing Irish industrial policy. This study was undertaken by a team from the Telesis Consulting Group, led by Mr Ira Magaziner. The results of their study are published through this report.

6. The objective which the Council gave to Telesis for the study was:

To evaluate existing industrial policies, and to make recommendations designed to ensure that the Irish Government's industrial policy is appropriate to the creation of an internationally competitive industrial base in Ireland which will support increased employment and higher living standards.

7. The Council wishes in the following paragraphs to draw attention to what it considers to be the fundamental recommendations in the Telesis' report. The Council is not, in this report, expressing its own views on these issues.

*This preface was agreed at the Council meeting of 17 December, 1981.

A separate report, containing the Council's own conclusions and recommendations on industrial policy, having regard to the four parts mentioned above, is in the course of preparation. The fundamental recommendations outlined in the paragraphs which follow have themselves led the consultants to put forward many other specific recommendations. These specific recommendations are not discussed in the following paragraphs.

The Telesis Report

8. The consultants recommend a reallocation of public expenditure on industrial promotion in favour of internationally trading indigenous industry and skilled sub-supply firms. The development of indigenous industry is a stated priority of existing industrial policies. The Industrial Development Authority (IDA) says that the main constraint on the development of indigenous industry has been the shortage of entrepreneurs and companies willing to start up new companies or expand existing enterprises. The IDA strategy is based on a two stage approach which seeks to identify and support stronger companies *after* initially increasing the population of business entrepreneurs. Telesis believe that the present programmes for small company promotion will not succeed in creating new, strong, exporting and skilled sub-supply companies. They recommend a more structured approach which would focus on building competences within companies. This approach is not intended to substitute for the present programmes for the development of small industries. They refer to their recommendation as a "hands on" approach which could only be undertaken in a selected number of cases. This approach is expected to make job creation initially more expensive, but to result in more successful companies and a reduction in the present rate of job losses in indigenous firms.

9. A second major recommendation by Telesis is that there should be a substantial reduction in the level of grants offered to new foreign firms. There are two main reasons for their recommendation. Firstly, they estimate that Ireland offers considerably higher incentives than other comparable locations for the average project which is of interest to Ireland; second, they believe that the funds could be better used in the development of indigenous industry. However, it is recognized that there would be considerable risks in adopting this approach due to the increasing intensity of international competition for inward investment. There would be concern that no action should be taken to reduce the effectiveness of Irish incentives in attracting foreign investment. Advocates of the present system say that the level of incentives for foreign industry is designed to reflect the international competition for projects and the supply of projects. In defence of the present levels of incentives it is argued, firstly, that they are based on a detailed knowledge and experience of attracting foreign industry which has involved extensive negotiation with foreign firms by state agencies and the monitoring of incentives offered by other countries, and secondly, it is said that experimentation with reduced grant levels could have the effect of destroying Ireland's reputation for consistency in its policies for attracting foreign investment. In the situation, it is argued that the reduction of grant levels could have a serious impact on job creation.

10. A third major recommendation by Telesis relates to improving control of the process of industrial development. They say that Ministers and Government Departments should play a more active role in the setting of overall strategy and policy direction, monitoring results and reviewing on-going policy. The formulation of current strategy for industrial development is, in their view, at present primarily the responsibility of the IDA. In effect advocates of the present situation however would hold that it is clearly difficult to pinpoint the exact points of control of industrial policies and the differences between the role of different participants. The Authority of the IDA, however, is appointed by the Minister for Industry and Energy and it includes representatives of the Departments of Industry and Energy and Environment. There are frequent discussions between IDA officials and Government departments and public representatives. Telesis argue, however, that the staff and information which are necessary for an effective primary role in steering the direction of industrial policy, are not available to the relevant Government Departments.

11. The Telesis report includes a survey of the electronics industry. They state that, despite the rapid growth in the number of firms operating and the number of jobs in this industry, the functions which would provide the basis for the development of higher value-added businesses are not located in Ireland. Proponents of the present situation would argue that the promotion of an electronics industry has been a relatively recent goal of Irish industrial policy. The IDA strategy for the development of an electronics industry was formulated in 1975. Employment in the industry totalled 5,000 in 1975, and is expected to approach 30,000 by 1985. In the context of its short life, it is argued that there has been rapid progress in developing an electronics industry in Ireland and in deepening the industry's roots and creating locally based ancillary functions such as systems engineering and software activities. Telesis contend, with regard to national sectoral strategies based on foreign enterprises, including electronics, that the main constraint is the economic rationale which guides the operation of the foreign owned hightechnology multinational firms.

12. In their study of natural resource based industries, Telesis undertook short studies of the beef and dairy industries. They curtailed their evaluation of these because agriculture was outside the specific terms of reference for the Council's review of industrial policy. In their brief analysis of the industry they refer to various aspects of agricultural production. The Telesis comments take issue with the reported results of other research projects in this area. The Council wishes to point out, at this stage, that some of its members believe that the Telesis evaluation is too brief to substantiate the considerations presented.

13. The Council's own comments on industrial policy will address the main issues arising from the Telesis Report together with a number of issues which for time, resource or other reasons were not analysed by Telesis. It is the view of the Council that the Telesis report is a major contribution to the formation of Irish industrial policies to meet the challenges of the coming decade. The Council decided that the final report from Telesis should be transmitted to the Government as soon as possible with a view to early publication.

**A REVIEW OF
INDUSTRIAL POLICY
BY
THE TELESIS CONSULTING GROUP**

SUMMARY

INTRODUCTION

In July of 1980, Telesis was asked by the National Economic and Social Council (NESC) to carry out a review of Ireland's industrial strategy. The objective of the policy review was "to ensure that the Irish government's industrial policy is appropriate to the creation of an internationally competitive industrial base in Ireland which will support increased employment and higher living standards".

For the past thirty years, Ireland has been engaged in a massive national effort to industrialize. Over the past two decades gross national product per capita has almost tripled. The Irish population increased in the 1970s for the first time this century. Ireland has succeeded in opening its economy in the mid-1970s while still increasing its overall manufacturing employment.

Though Ireland has been improving its living standards, the income gap between it and most other industrialized countries has seriously widened over the past twenty years; the economy has become increasingly dependent on foreign corporations for its industrial jobs; the net trade balance has deteriorated; the cost of state aids to industry has risen rapidly. In addition the country faces an international environment changed by recession, the energy crisis and industrial development in many new regions of the world.

The report presents the conclusions reached after a seven month study carried out between September 1980 and March 1981. Summary views are given of various Irish industrial sectors such as dairy, textiles and electronics. The sectors highlighted were chosen for their importance to the Irish economy. These summaries are brief audits. The goal of this report is to provide a brief strategic overview, to identify problems and suggest overall directions for future policy.

The study is divided into four sections. The first section gives a brief introduction to the approach taken in the study; the next section presents a brief survey of the current structure of Irish industry and various threats and opportunities which confront it. The third section reviews Irish industrial policy and presents an assessment of the potential success of current policies in ensuring Ireland's continued employment and income growth in the coming decade. The final section presents a series of recommendations for the strategy and conduct of Irish industrial policy based on the foregoing analysis.

THE APPROACH

Greater wealth for each person in a nation is created by increasing the value added per work hour embodied in the goods and services produced in the country. Improvements in value added per work hour, however, are not sufficient. The potential for greater wealth can only be realized if workers displaced by efficiency improvements or resource shifts find work in other productive enterprises.

The standard of living of a nation involved in world trade depends upon its competitive productivity in the goods and services it produces which are subject to trade. If absolute productivity for a product is increasing by 2% per year in Ireland, but major international competitors are improving their productivity by 5% per year, then Ireland's standard of living may not improve.

The creation of wealth in an open economy requires continual restructuring of industrial activities towards businesses which allow higher value added per employee, attaining higher productivity than others participating in these higher value added industries, and maintaining high levels of employment. Some industries are not subject to international trade. In the analysis a distinction is made between traded and non-traded activities. Non-traded business include services which are usually localized within a country or a region of a country, such as health care, goods distribution, public administration and house construction. They also include certain manufactured goods in which the productivity improvements that can be achieved through increased production scale are not great enough to offset the increased costs of distributing the product to a foreign country. Typically, manufactured goods of this sort include those with a low value to bulk ratio, such as steel reinforcing bars or large steel beams; products where the value of scale is limited, such as large plastic moulding; and products which are difficult to transport, such as sulphuric acid or fresh milk.

For an economy such as Ireland's, which is small and very dependent on world trade, industrial policy must focus on traded goods and on the non-traded industries such as infrastructural activities, whose inputs are crucial to competitive success in the traded-goods areas.

Goals of Industrial Strategy

The goals of industrial strategy for traded businesses in a developed country trying to achieve high international income levels are to:

- exploit opportunities where natural raw material endowments can provide competitive advantage;
- continually restructure industry to phase out businesses which are becoming subject to competition from low wage countries;
- gain competitive productivity advantage in selected manufacturing businesses vis-a-vis other developed countries. (Wage rates or investment and tax subsidies can be used to gain advantage initially but they must be replaced by productivity advantage if incomes are to rise.)

For businesses which are usually non-traded in developed countries, the first task for Irish industrial policy is to ensure that imports are substituted. Then, efficient competition should be promoted where appropriate, or efficient monopolies where scale economies dictate their necessity. Maximizing absolute productivity improvements is of prime importance.

Natural resource-based industries

In choosing the products which it will export, a country should first look at its physical endowments to see where it may gain competitive productivity advantage due to natural factors such as geology, geography or climate. Natural resource-based industries are those in which the raw material input, extracted from the land or sea, is a large portion of the total cost of a manufactured product. These industries offer particularly strong opportunities for wealth creation. The proportion of value added domestically in natural resources is likely to be much greater than in manufacturing, where a significant proportion of inputs must be imported, especially in a small country.

Competitive position in a raw-materials business depends on two major factors; extraction costs, including both the direct and indirect infrastructure costs; and transportation costs to industrial and personal consumers. Over time, however, transportation costs, particularly for long distances over water, have declined in relative terms. With the development of international capital markets and the increased government financing of infrastructure, the previously inhibiting high capital costs associated with the development of industries such as mining and forestry become less important. With the decrease in the importance of transportation and capital barriers, extraction efficiency is now the key to competitive success.

Products based on farm output still account for almost half of Ireland's net exports. Other raw materials-based industries in Ireland have been small, though Ireland does have one of the world's best lead/zinc deposits and possesses timber resources which represent a potential source of wealth. In addition, offshore gas is currently mined in small quantities, and offshore oil is a possible resource in Ireland's future.

Manufacturing Business

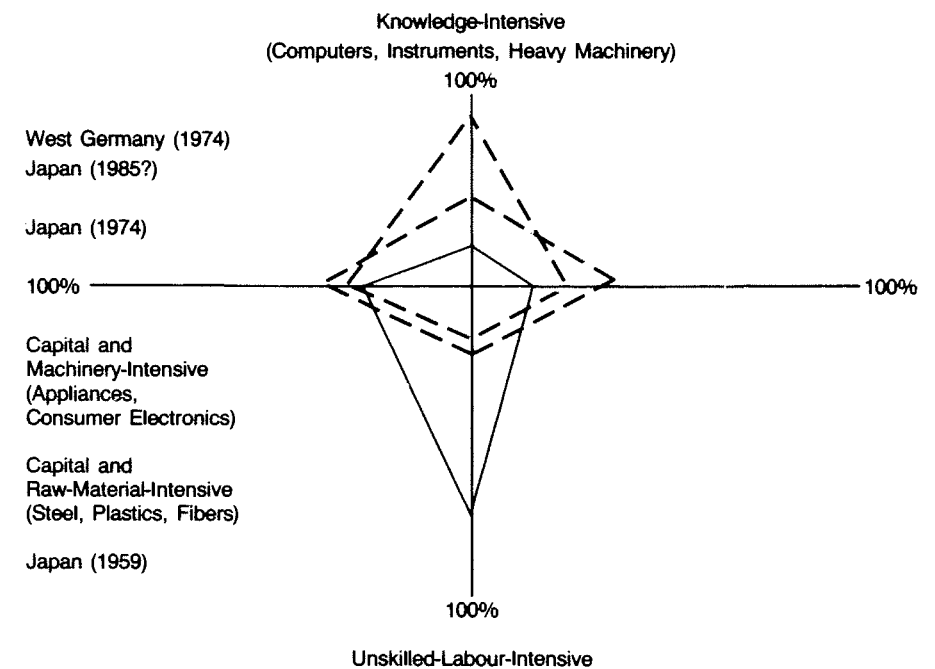
The relative success of a country's efforts at industrialization can be illustrated by the relative placement of its industrial activities on a chart used by the Japanese Economic Planning Agency to express Japan's economic development. The movements of Japan toward higher value added industries is depicted in Exhibit A which represents Japan's industrial strategy and has provided a paradigm for some newly industrializing countries. The diamond shape represents Japan's mix of total exports among four different categories of industry, each presenting different requirements for competitive success. The significance of the diamond is that industrial activities at the lower end can be performed in many countries, including those with low incomes and wages. Those at the top can only be performed in a limited number of countries as they require more complex-factors, such as technology organization and strategy for competitive success. The proportion of businesses an economy has which are complex-factor cost determined rather than being low wage-rate dependent, is a measure of its potential for increased living standards.

The process of overcoming the investment barriers to participation in businesses towards the top of the diamond, and achieving the ability to pioneer new "knowledge-intensive" businesses, is the means to achieve higher living standards. The keys to successful restructuring toward higher valued added businesses are a skilled white-collar workforce, a skilled blue-collar workforce, a sufficient number of organizations which are internationally competitive and physical infrastructure. If the Irish manufacturing sector is to provide increased living standards it will be a necessary, but not sufficient, condition to effect a restructuring away from low-wage businesses. Competitive advantages over other developed countries in selected complex-factor cost businesses must also be achieved.

To achieve competitive advantage in a business, a producer need not be the most productive competitor in every element of the cost structure of a product. Nor must the producer be the most productive competitor in the largest element of the cost structure, since significant productivity differences may not always be possible to attain in these areas. Instead, the most critical areas of cost are those that offer opportunities for gaining productivity advantages relative to competitors.

Exhibit A

The Evolution of Industrial Structure



For example, in certain segments of the plastics conversion business, all competitors can readily achieve equivalent materials and manufacturing productivity, which together represent more than 80% of the product cost. Productivity advantages can, however, be gained by one competitor over another in warehousing and distribution.

There are five main areas where productivity advantages may be gained in complex-factor cost businesses:

- (i) purchasing e.g., unit price reductions to large volume purchases
- (ii) manufacturing e.g., scale, run length or proprietary technology
- (iii) marketing and distribution. Lower costs may be achieved through obtaining a high share of sales in a given geographic region.
- (iv) application engineering. A high market share per application provides the opportunity to gain competitive advantage.
- (v) research and development. In some businesses research and development can constitute the key area of competitive advantage. These businesses typically are characterized by a small total market for the product, high purchase price, and low purchasing frequency. Cost advantages derive from a competitor's ability to capture a large share of the market for a product generation.

The following sections analyse to what extent Ireland's manufacturing businesses are based on low wage-rates or complex-factor costs, the country's success in overcoming the investment barriers to industrial restructuring and the threats and opportunities facing the complex-factor cost businesses in which Ireland participates.

CURRENT STRUCTURE OF IRISH INDUSTRY

IRELAND'S NATURAL RESOURCE-BASED INDUSTRY

Agricultural-Based Industries

Ireland's food processing industry employs 24.7% of all workers in manufacturing in Ireland, down from 26% in 1973. The sector's share of total Irish gross exports is 37% down from 49% in 1970. If exports are considered net of import content, the Irish food sector accounts for almost 45% of total Irish net exports.

In this section the focus is on those product areas which are clearly natural endowment based and which are exported from Ireland. For these products, such as beef, dairy, fish, animal feed and margarine, agricultural production accounts for an average of 80 to 90 per cent of total product cost.

Two product areas stand out as being of particular importance to Ireland: beef processing and dairy products. Together, they represent 71% of total gross food processing exports in 1979 (Exhibit B) and about 30% of total employment in 1980.

The success of Irish dairy and beef processors is to a great degree dependent on the competitive strength of Irish farmers. It is also dependent upon the terms of the Common Agricultural Policy. From 1973 to 1978, Irish intervention prices rose rapidly to catch up with EEC prices at a time when EEC prices were still moving up steadily. The existence of sizeable surpluses in the 1978-1980 period has caused demands from some member states for reductions in food prices and in Community expenditure on agriculture. The first response to these pressures has been a real reduction in intervention prices. A longer term response is likely to involve a gradual shift of production between countries, from the inefficient to the efficient ones. It is therefore essential to understand whether Ireland's actual or potential cost position is lower than that of its competitors.

The Irish dairy processing industry is dependent on exports to other EEC countries. Over 90 per cent of skim milk product and 70 per cent of butter production are exported. Currently the Irish processing industry is potentially competitive with similar plants abroad. However, Irish dairy farming is still

Exhibit B					
Food Processing Export Sales					
(constant 1979 £)					
	Total (1979 £'s)	Meat(%)	Dairy (%)	Other (%)	Total (%)
1970	477M	51	18	31	100
1975	887M	46	29	25	100
1979	1108M	41	30	29	100
Average					
Annual Change					
1975-79 (%)	+5.7	+2.7	+6.0	+10.3	—

Source: CSO Trade Statistics

generally uncompetitive and the impact on processing costs is to make the total dairy product uncompetitive. While present milk prices are competitive, this is made possible only through farm incomes which do not provide many farmers with an adequate living standard and involve a considerable array of financial supports by the government. In addition current farming practices and products cause disadvantages at the processing stage. The low fat content of Irish milk and the seasonality of production induces under-utilization of capacity at certain times of the year. Seasonality also limits developments in cheese to products which have a long storage life or those destined to be processed.

The beef industry's performance in the past five years has been at best moderate. The beef sector grew very fast from 1969 to 1975. Since that period, notwithstanding the higher price levels prevailing under the CAP, its performance in terms of output and product mix has not improved noticeably. It has remained cyclical, seasonal and very uneven in quality of output. Live exports still constitute a significant portion of output.

The effectiveness of the traditional tendency to direct most food and beef exports towards Great Britain is questionable. After many years of investment, the relative price of Irish food products in the UK does not demonstrate a premium brand image. The recent success in selling into Germany, though limited, indicates a great potential for Irish food products on the Continent. However, measures to improve the marketing of Irish agricultural products cannot be totally successful until the problems are solved at the primary production level.

Non-Agricultural Resource-Based Industries

In addition to its grassland endowment, Ireland has a series of other natural advantages which provide the basis for industrial development. Exhibit C presents a summary list of these industries. In the study the focus is on the largest of these which are currently or potentially tradeable — mining, gas and forest products. The zinc, barytes and gypsum resources are well used. The

Exhibit C			
Irish Extractive Industries (1981)			
	(000)		
	Est. Employment	Est. Sales (£m)	% To Export
Base Metals	1.6	130	99
Industrial Minerals	0.1	24	85
Coal	0.1	2	0
Peat	6.3	40	20
Quarries	3.5	120	0
Cement, concrete, clay and products there	1.6	140	0
Gas	0.1	45	0
Forest Products	4.6	50	5
	<u>17.9</u>	<u>551</u>	

desirability of the use of natural gas to produce ammonia and urea is questionable. The forestry resources are under-utilized due to poor organization. Finally there are a number of valuable assets awaiting development, such as, the deep water ports of Bantry Bay and the Shannon Estuary, and the Bula zinc mine.

IRELAND'S INDIGENOUSLY-OWNED INDUSTRY

The indigenous sector (defined as companies owned in majority by Irish interests) represented two-thirds of total manufacturing employment in 1980, down from three-quarters in 1973. During the period 1973-80 employment in indigenous manufacturing industry grew by only 2,000. This overall picture hides a deep structural change. The number of jobs in textiles, clothing, and footwear fell by more than 10,000 over the period. This was matched by increases in metals and engineering (more than 5,000), food, cement and glass, and printing and packaging (2,000 each). Despite their importance in terms of numbers employed, indigenous businesses have not been major exporters, and represent only 30% of total Irish exports of manufactured goods (Exhibit D).

This very simple description of structural change might be interpreted as showing the successful replacement of employment in the "old" protected sectors by a generation of companies in new growth sectors. A different picture emerges, however, from an analysis which examines the competitive environments of these businesses.

A rough distinction between traded and non-traded or "local" industries shows that the two industry types have performed very differently. Most traded industries have fallen from their 1973 employment levels, with some noticeable exceptions in glassware and agricultural machinery. Almost all non-traded industries, on the other hand, have enjoyed net employment increases, e.g. packaging, cement, and metal fabrication.

Growth generated by the development of non-traded business opportunities can only provide a limited source of income due to the size limitations of domestic demand. Long-term industrial growth can only be provided by the development of businesses exporting outside Ireland.

In the analysis of the reasons for past performance and the contributions that indigenous businesses make to the development of a higher income economy, a distinction is made within each industrial sector between three broad types of businesses which cut across the common trade classifications: businesses subject to low wage competition; businesses subject to competition from developed economies ("complex-factor cost") and "non-traded" businesses.

Exhibit D		
Irish Exports by Company Ownership		
(Gross Exports)		
		1979 Exports
Company Ownership	IR £M	Exports as % of Production
Total	1856	51.2
Irish	549	29.5
Mixed	35	42.3
Multinationals	1272	74.5

Source: CTT and Exhibit 3.2 of main text.

Traditional Indigenous Industry

A high proportion of the businesses in textiles, clothing, footwear and simple metal fabrication have disappeared or reduced employment in the face of competition from low wage producers. Some Irish companies can retard their decline by investing in improved production facilities. Other companies may also identify defensible business segments based on such factors as short lead times, design and proprietary process technology. It is most likely that further job losses can be expected in industries like textiles, clothing or footwear where there is still a significant number of low wage-rate businesses (long-run knitting and non-wool clothing, men's semi-leather shoes, and others). The rate of job loss should be somewhat lower than the historical figure of 6% per year, however.

The requirements for successful complex-factor cost businesses have already been discussed. These businesses must identify key factors in the cost structure (run length, scale per application, distribution scale) and establish long-term competitive advantages in these factors through appropriate investments and organizational structure.

Seventy five per cent of exports by indigenous companies go to the United Kingdom. In addition to language and culture similarities and geographical proximity, some characteristics of the British consumer are close enough to those of the Irish to make this a relatively easy market to enter. However, geographical barriers such as consumer tastes, safety standards or measurement systems, tend to erode over time. As the UK progressively integrates into the EEC, standardization will take place as it did a decade earlier between the original six members. Brighter colors and plain patterns, favoured in the UK, are appearing in carpets from continental producers. electrical standards are progressively being harmonized within the EEC. As a result of this, Irish companies may have to face increased competition in the UK from stronger competitors in Europe who may be several times larger than British competitors. In ladies' outerwear for instance Ralph of Germany has a larger volume resulting in run lengths per style that are twice as large as Vistex of the UK who has so far been the Irish company's chief competitor.

As Ireland's share of its traditional market erodes, the factors which have protected some of its exports to the UK can often be barriers to further international expansion. These barriers may be in production (retooling for different measurements standards, setup cost between runs), design (meeting different standards of different user requirements), or distribution (cost of initial advertising campaigns and sampling programs). Not many Irish companies have been willing or able to make the high-risk investments and accept the long payback horizons for new technologies or product redesigns.

Irish companies have also had difficulty in developing marketing, technical selling and distribution advantage in export markets. Again, the rule is demonstrated by the ease with which one can name almost all of the exceptions. Distribution organizations, for example, require high initial investments in working capital and the ability to sustain loss for a number of years in the penetration period. Only a few companies, relatively large by Irish standards, have been able to do it.

Marketing expenses are mostly linked to a specific geographical market, since each country has differences in language, distribution, structure and consumer taste, the absolute cost of any specific advertising campaign tends to be the same. This implies an obvious cost disadvantage for the entering Irish exporter who is small relative to existing competition.

Most Irish food exports are either in bulk beef and dairy commodities, or come from the Irish installations of multinational companies which can overcome the logistics and distribution problems through their elaborate networks abroad. Indigenous firms have not developed significant exports in complex-factor cost food businesses because of a failure to overcome key competitive cost barriers. The most significant of these barriers are high packaging and energy costs, high internal logistics costs within foreign country markets, and the difficulty of creating a successful brand image in other countries.

In contrast to the traded complex-factor cost and low wage-rate businesses discussed above, large companies in non-traded businesses such as cement, packaging, distribution and importing have experienced considerable growth over the last five to ten years. Many have invested abroad in businesses in the same fields as those in which they participate in Ireland and in unrelated non-traded businesses in Ireland itself. While these strategies are understandable from the point of view of the individual companies, from the point of view of the country this is not the best use of the managerial, financial and organisational capability of these companies.

The New Indigenous Industries

About 1,262 indigenous companies have been created since 1973, with a total employment of 21,850 in 1980. Most of this growth has been in non-traded businesses, stimulated by plant construction, agricultural investments and infrastructure expenditures. About 15 per cent of the new employment has been created in predominantly traded sectors such as textiles and clothing. The other 58 per cent is attributable to heterogeneous sectors like metals and engineering, food or consumer goods and plastics (Exhibit E).

Few of the newly created businesses serve the sub-supply needs of foreign firms in Ireland. Only 8 per cent of the components and sub-assemblies used by the largest foreign sector, engineering, were sourced in Ireland in 1976. This is a result both of the type of foreign investments in Ireland and of the failure of existing Irish indigenous companies to adapt to the stringent requirements of a competitively traded sector. In Belgium, a small country with a similar proportion of foreign-owned firms, indigenous firms are 3 times as successful in supplying the requirements of foreign-owned companies.

There has been successes in areas such as plastic injection, plastic moulding tools and hydraulic components. Overseas companies which were interviewed, however, frequently complained of difficulties in sourcing products in Ireland, either because of poor quality or lack of cost competitiveness. Most computer cabinetry is still being imported from sub-contractors in the UK at high cost to manufacturing companies in Ireland. Manufacturing companies are also importing precision iron castings and precision moulded plastic parts due to the shortage of high-quality producers in Ireland.

A few companies have established end product export businesses in areas such as ambulances, excavator buckets and transmission equipment. Most of them, however, are limited to exploiting customer or distribution similarities between Ireland and the UK and find it difficult to export to Europe or beyond. The overall impression is that individual entrepreneurs and investors have rarely been able to develop significant export businesses beyond the "British zone" and that most successes have required some form of continuing external support from public procurement or direct transfer of human skills from abroad — for example, through Irishmen returning after gaining extensive experience abroad.

In summary, the opportunities for Irish industry lie in better exploiting the market provided by multinational companies currently in the country, and in expanding current industries, now serving only Ireland and the UK, to serve the rest of the EEC market and beyond. The barriers to the realisation of these opportunities are adequate skill levels to produce engineered products of sufficient quality; resources to sustain long-term investments in product design, marketing, distribution and price-cutting necessary to penetrate new markets; and a sufficient organisation (either within a single company of adequate size or within a cluster of related small companies) to provide adequate efficiency, reliability and financial viability.

There is no one appropriate size for a firm. It takes a stronger corporate structure than is typically found in Ireland, however, to promote a skilled foundry, computer cabinet operation, or tool-maker. Small companies can indeed be a source of innovation, but bringing innovations to competitive business success often requires the assistance of entities with larger pools of resources.

FOREIGN-OWNED COMPANIES IN IRELAND

Foreign-owned firms employ about 80,000 people in Ireland, or about 34% of the total manufacturing workforce. The increase of 22,000 in the number of jobs during 1973-80, contrasts with the modest increase of just over 2,000 jobs in indigenous industry over the same period.

This increase masks a considerable turnover of jobs. About 16,800 jobs, equal to 29% of the total in foreign-owned companies in 1973, have been lost over the past seven years. Job gains in existing companies were proportionally similar to those in indigenous industry. Employment generated from new projects, however, was proportionally higher, than in the case of indigenous industry and is the main cause of the better performance in the foreign sector.

A large company producing traded goods will usually invest outside its home market for one or more of four reasons:

- (i) to gain access to a market which is difficult to serve competitively from outside due to tariffs, logistics, or customer preferences;
- (ii) to gain access to a pool of skills not sufficiently available in the home country;
- (iii) to gain access to a needed raw material;
- (iv) to gain access to low labor costs, or to special tax or other financial advantages.

Currently, most foreign-owned companies use Ireland as a convenient manufacturing satellite for sales in the EEC. Over 80 percent of the companies visited during the study came to Ireland primarily because it provided a tax shelter for penetrating the EEC. Fourteen per cent, especially those who came in the 1960s or early 1970s, were attracted primarily by the relatively low wage rates.

The key questions to be answered in evaluating Ireland's program of attracting foreign companies are

- (i) to what extent the jobs and net exports earned will last and
- (ii) To what extent these companies will support higher industrial incomes by helping Ireland to overcome the investment barriers to successful participation in complex-factor businesses.

The remainder of this section contains an analysis of foreign-owned companies focussing on the engineering sectors, both electrical and mechanical, since they represent the largest proportion of current employment and project approvals (Exhibit F). It also discusses the chemical and pharmaceutical industry since that industry has been responsible for a significant portion of total investment in the country.

Electrical Engineering Industries

Electrical engineering industries have been Ireland's most significant growth areas in the late 1970s and promise to expand even more in the 1980s. These industries have been the major focal point of activity for the IDA over the past few years. As of December 1980, about 70 multinational companies in the electrical and electronics industries had begun operations in Ireland, employing over 10,000 people. This number is forecast by the IDA to grow rapidly over the coming years.

Exhibit E
Company Creations in Irish Indigenous Manufacturing
1973-1980

	Number of Jobs Created	Number of Companies Created
Predominantly Non-traded Sectors		
Paper, Printing, Packaging	2,300	78
Wood, Furniture	2,200	257
Cement, Glass and Clay	1,300	113
Drink, Tobacco	50	4
Sub-Total	5,850(27%)	452(36%)
Predominantly Traded Sectors		
Clothing and Footwear	2,200	89
Textiles	1,100	47
Sub-Total	3,300(15%)	136(11%)
Mixed Sectors		
Metals, Engineering	7,300	417
Food	1,700	94
Consumer Goods and Plastics	2,800	133
Chemicals	900	30
Sub-Total	12,700(58%)	674(53%)
Total	21,850(100%)	1,262(100%)

Source: IDA employment Survey

Exhibit F
IDA Grant Aided Foreign Companies: Job Approvals*
(1978-1980)

	Number of Projects	Job Approvals (Thousands)	Percent Total Job Approvals
Electronics	44	15.9	33
Metals and Mechanical Engineering	77	11.4	24
Chemicals	22	3.7	8
Plastics	11	1.3	3
Food, Drink & Tobacco	7	1.4	3
Wood, Furniture, Paper and Printing	10	1.3	3
Textiles & Clothing	29	5.8	12
Clay, Glass & Cement	4	.7	1
Other	38	6.0	13
TOTAL	242	47.5	100

* New overseas firms

Source: IDA Unpublished Data, Telesis

The key competitive activities in computer businesses involve product design (including hardware, software, overall system architecture and language software) and, where sales are not done through original equipment manufacturers, marketing and service.

One must look carefully to determine the extent to which the electronics industry is really rooted in Ireland and can contribute to rising incomes in the country. Of the 60 companies surveyed, none have a truly stand-alone operation in Ireland, and only three have operations in Ireland which embody the key competitive elements of the company's business. All the others are currently manufacturing satellites, performing partial steps in the manufacturing process.

Skill development and linkages in Ireland have been limited. The electronics industry is a very high-skilled industry worldwide, but the activities in Ireland's electronics industry do not now reflect this. The interviews revealed that the limited sub-supply linkage is not due to lack of interest on the part of the foreign companies. On the contrary, many of these companies are suffering serious cost penalties by importing components.

The electronics industry in Ireland is growing rapidly and many of the companies are highly profitable. The industry ranks well in terms of viability in the near future. However, the industry has not so far provided the mechanisms for Ireland to move toward higher value-added businesses. Companies have come primarily for tax concessions and other subsidies, and to enter the EEC. If present levels of skill development and sub-supply infrastructure are not improved, the industry's long-term future will be threatened.

Mechanical Engineering

Ireland's foreign-owned mechanical engineering companies consist mainly of sub-assembly and assembly shops of the sort commonly found in newly industrializing countries. Usually, some machining, turning, punching, metal-forming or coating functions are performed, but they are limited in complexity and assembly forms the basis for most employment. Of the 34 shops surveyed, about half had only one or two skilled blue-collar workers and one or two engineers. Most of the rest had a small pool of skilled workers and designers for modifications of products, but together they represented less than 1-2% of the workers in the plant.

There is one notable exception which employs over 40 skilled toolmakers and a number of engineers and draftsmen producing tools and, more recently, stampings for the auto industry. Four other companies perform significant design functions in Ireland and employ a number of skilled workers, but these companies remain in the minority.

The foreign mechanical engineering industry in Ireland is hampered by a shortage of skilled workers and by the absence of a skilled infrastructure of suppliers in areas such as casting, toolmaking, precision plastics and machine shop sub-contractors. The mechanical engineering companies in Ireland purchase less than 10% of their component needs in Ireland, though this is economically disadvantageous. They would like to buy more, but the low quality and high cost of the sub-suppliers prevents this.

Chemical and Pharmaceuticals

The chemical and pharmaceutical industry in Ireland consists of fairly specialized plants which import feedstocks or intermediates, perform a few process steps and export either intermediates or finished products. The competitive key in most fine chemical and pharmaceuticals is R&D. In five of the 32 businesses surveyed, distribution scale was also a key determinant of overall competitive advantage. Significant competitive edges within a given business can often be gained, leading to very high profitability.

The industry represents 56% of total investment by US companies in Ireland, and 68% of all income earned by US companies in Ireland. The profitability of the industry partly explains (along with the tax rate) why the after-tax profits of US firms in Ireland is better than that in other European locations. In addition to being highly profitable, many of the chemical and pharmaceutical plants employ a higher proportion of skilled labour than other industries in Ireland.

Only two of the 32 companies surveyed carry on research and development in Ireland and none managed the distribution system from Ireland. Thus, the key activities which determine competitive success in this industry are not carried on in Ireland. Further, the industry provides very little direct opportunity for sub-supply. Chemicals and feedstocks are brought in from abroad and sent out again.

The tax incentives offered by Ireland form and basis for these companies' presence in the country. Any changes in transfer pricing rules or in tax laws in other countries which made these incentives less attractive could cause a number of these facilities to close, since the companies interviewed reported that they suffer significant logistical penalties for operating in Ireland.

Obstacles to Successful Growth in Foreign-Owned Industry

Some people argue that the mix of companies more recently attracted to Ireland will lead to an improvement in job defensibility over past projects because they are higher technology engineering industries rather than more traditional textile, clothing and food sectors. There is no clear evidence to support this view. While the ratio of net change to existing employment was worse for the traditional sectors than for engineering industries during 1973-80, it is unclear whether this reflects sectoral differences or merely differences in the age of the companies.

It is too early to tell how the recent wave of electronics projects will perform. Though these companies are now growing rapidly, there are a number of threats which may dampen future performance. Capital intensity is likely to increase and may lead to job losses and to an increase in grants necessary to attract and maintain projects. An additional threat is the inevitable slowing of growth in some electronics businesses in the coming five to ten years, and the resulting "industry shakeouts". Most Irish operations in electrical engineering businesses do not embody key skills or processes which will make location in Ireland indispensable.

It is reasonable to expect a continuation of job losses in foreign-owned firms at a rate similar to that of the past decade. This means that new companies must be attracted to Ireland for significant employment gains to be registered in foreign-owned industry. The question which must be addressed, however, is the extent to which the employment provided will increase to sophistication of Ireland's industrial structure and, therefore, the industrial incomes of the country.

Foreign-owned industrial operations in Ireland with few exceptions do not embody the key competitive activities of the businesses in which they participate; do not employ significant number of skilled workers; and are not significantly integrated into traded and skilled sub-supply industries in Ireland. Many people in Ireland acknowledge these facts but believe that events already underway will change this situation as new higher-technology industries are attracted to the country. The electronics industry is often used as the primary example of the change many perceive to be occurring.

Programs currently underway will ensure that the structure of Irish industry will evolve slowly toward higher-skilled activity; a small number of additional firms will locate sensitive parts of their businesses in Ireland in the coming years; and sub-supply integration will increase. These programs will raise Ireland's income levels — but not dramatically. Ireland's education and skill levels and infrastructure will continue to be limiting factors, though efforts to improve these factors should continue.

The ultimate limiting factor, however, is the competitive economic dictates of the high technology multinational firms. There are a number of reasons why electronics companies might prefer to place key parts of their activities in countries other than Ireland:

- Applications engineering and marketing functions are often best performed near large concentrations of customers.
- Many American companies believe that it will become increasingly important to employ locals in large EEC countries in order to counter government efforts in these countries to develop an indigenous electronics industry.

- A number of American companies feel that crucial R&D functions should be performed close to home to minimize the risk of spinoffs.
- Ireland's remoteness and small size will always be a disadvantage for marketing functions.
- A tax haven is not necessarily a good place from which to handle marketing and engineering functions. Since these activities are often recorded as costs on the profit and loss statement, they subtract from current profits.

Further integration is occurring in Ireland's existing electronics plants, but with a few notable exceptions, this integration will not significantly increase the importance of the Irish facilities. Comparison with other countries which have been the sites of mobile electronics investments in the past does not support greater optimism. Scotland has a larger and longer established electronics industry than Ireland, with current employment for about 34,000 people in its foreign-owned electronics sector. Despite this longevity, the degree of integration in these operations is limited. A recent report on the Scottish electronics industry stated that the majority of non-Scottish operations were established as manufacturing satellite and few have progressed significantly beyond this role.

CURRENT INDUSTRIAL POLICIES AND INSTITUTIONS

Ireland has a very sophisticated and extensive industrial policy, involving large numbers of people in a wide variety of activities to assist industrial development. The intentions expressed in the philosophy and goals of Irish industrial policy are intelligent and clear, the agencies are extremely inventive and energetic in devising programs to carry out these goals, and substantial sums of money are being spent in support of these efforts.

Modern Irish industrial policy has had as its goal the creation of new employment in industry with ever-increasing income levels. The methods for accomplishing this goal have been consistent since the 1950s: encouraging industrial investment by Irish and foreign companies through general promotional activities and financial incentives, and opening the Irish economy to free trade.

Indigenous Industry

The three Irish development agencies — IDA, Shannon Free Airport Development Company (SFADCo) and Udaras na Gaeltachta have all recently put more emphasis on indigenous development in their statements of policies and programs. The IDA is aiming to have 35% to 40% of new job approvals in the next three years come from indigenous companies and has revamped its organization to achieve this goal.

The Small Industries Division has doubled its staff over the last four years to a current level of fifty people, of which twenty-five are professional. In 1975, a Project Identification Unit was established to identify new manufacturing opportunities in Ireland and to encourage existing and new companies to exploit these opportunities. The Enterprise Development Programme was established in 1978 to encourage "first-time" Irish entrepreneurs with professional backgrounds (managers, engineers, etc.) to establish businesses for themselves.

SFADCo was given a mandate in 1978 by the Minister for Industry, Commerce and Tourism to launch a new pilot project for developing small indigenous firms in the Mid-West. This project was based on the concept of an agency for small firms. The agency would serve as a "one-stop shop" for small industrialists, making all advisory services, financial incentives and support programs directly available to them. The staff resources and capital expenditures (in buildings particularly) devoted by SFADCo to small industry represents the greatest effort ever undertaken for these firms.

Foreign-Owned Industry

The IDA is the primary agency concerned with attracting foreign-owned companies to locate in Ireland and ensuring the success of their start-up in the country. It has done this by developing a marketing organization which is unquestionably the most dynamic, most active, most efficient and most effective of its kind in the world. The incentives which the IDA can use to induce a company to locate in Ireland are varied and substantial. The fundamental attraction is the 10% tax rate. In addition there are capital grants on fixed assets, grants for training and research and development and tax based lending. The current strategy of the IDA is to encourage firms locating in Ireland to develop an integrated business in the country, with particular emphasis on electronics companies and professional service companies.

Critique of Irish Industrial Policy

The stated goals for Irish industrial policy are appropriate. The industrial structure described earlier in this report does not, however, reflect the successful achievement of these goals:

- high-skilled, high-technology enterprises are rare;
- Irish indigenous exports are small and limited in geographic scope;
- Irish companies are not successfully providing sub-supplies to foreign-owned industry;
- small firms exist primarily in low-skilled non-traded businesses;
- little cooperation exists between primary producers and processors in raw materials-based businesses;
- foreign-owned industry is often unsophisticated and the evolution of existing companies shows inadequate promise for substantial improvement.

The State-sponsored agencies concerned with industry are generally extremely well-run organizations. Communication between private industry and public agencies is usually very good. There is undoubtedly in Ireland a degree of common purpose regarding industrial development that is rarely found in other countries.

It is sensible for a newly industrializing country, like Ireland, to actively attract foreign-owned firms to accelerate the development process. These firms bring needed capital, a market for the creation of industrial infrastructure, skills, and jobs to the country. Successful indigenously-owned industry is, however, essential for a high-income economy. No country has successfully achieved high incomes without a strong base of indigenously-owned resource-based or manufacturing companies in traded businesses. These companies inevitably bring managerial and high-skilled technical employment, a requirement for high levels of services and direct income to the home country.

THE COST OF IRISH INDUSTRIAL POLICY

Ireland has embarked upon an ambitious policy to create employment and raise income levels. The rapid rise in the cost of the country's industrial programs is not surprising. The benefits to be gained from industrial development are significant and it is appropriate that the Irish nation spends as much on investment for industrial development as it can afford. The concerns below refer not to the overall level of investment, but to the allocation of it.

The IDA receives by far the largest share of total funds for industrial policy (62% of all direct funding), must approve the leasing which represents half of the tax foregone from the banking sector and heavily influences other expenditures. The major portion of IDA funds is awarded in grants to companies investing in Ireland.

During the period 1973-79 the average grant approved for each anticipated job in foreign industry was £8,400 (1980 £s).^{*} The equivalent figure for indigenous companies over the period 1970-80 was £4,900. The average actual grant payment per job created and sustained in foreign industry was £7,400 (Exhibit G). The equivalent figure for indigenous industry was £12,500. The reason for the significantly higher cost for indigenous jobs is that unrealized jobs from foreign-owned firms arise primarily from firms never realizing their

^{*}All cost figures in this paragraph are 1980 pounds.

projected asset or employment targets and therefore not receiving full projected grants. In indigenous firms goals are more often met but not sustained, as firms decline or go bankrupt after having received their grants.

The levels of expenditure allocated to the attraction of foreign-owned firms must be questioned on a number of grounds including a comparison of international incentive packages, Ireland's share of internationally mobile projects and the views expressed in the course of interviews.

In comparing the incentive packages of different countries simplifying assumptions have to be made, because of the discretionary nature of most schemes. There is a significant difference between what a country is prepared to offer a particularly attractive project and what it offers on average to ordinary projects. Nevertheless it can be said that Ireland on average provides a substantially better incentive package, as measured by the discounted value of incentives offered, than other competing countries for attracting foreign firms. Its incentive package is considerably more generous than that of other European countries even when valued on a 5 year return basis which underestimates the value of Ireland's tax incentives.

Exhibit G
Grant Cost Per Sustainable Job for Foreign Companies
Locating in Ireland under IDA Programs (by sector)*
(1973-1980)

	Grant Paid (1980 m£s)	Grant Cost Per Jobs (000 1980 £)
Electrical Engineering	27.4	3.6
Mechanical Engineering	28.0	6.3
Wood, Furniture	1.1	4.1
Clay and Glass	2.5	3.7
Food	5.4	5.3
Drink and Tobacco	1.4	4.9
Textiles	59.5	12.8
Clothing	2.2	8.3
Plastic Products	12.4	9.0
Paper and Printing	2.4	11.3
Chemicals	24.9	9.3
Other	9.9	5.8
TOTAL	177.3	7.4

*Includes only those foreign-owned companies who have received grant payments under the new industry, process and product and R+D Grant Programs.

In estimating Ireland's share of mobile greenfield projects a comparison was made with those regions and countries in Europe most often mentioned by multinational companies interviewed as potential alternate locations to Ireland. All of these entities, Northern Ireland, Scotland, Wales and Belgium actively recruit foreign investment. Within this group, Ireland attracted 80% of the new mobile projects (those without company facilities already in the country) during

1978 and 1979. No doubt this successful record is in part attributable to the marketing efforts of the IDA and the increasing relative attractiveness of Ireland as an industrial location. Nevertheless, in most businesses, if a company has an 80% market share and gives the largest discounts, it is usually appropriate to consider "testing the water" by raising prices (in this case, decreasing grants).

During the course of the study, almost 100 multinational companies were interviewed. Most had operations in Ireland and all of them had considered Ireland as an investment location. There were also discussions with officials from other development agencies. The distinct impression left by these interviews is that Ireland may be offering more than is necessary, in many cases, to attract foreign-owned firms to the country.

In our recommendations we will suggest a reallocation of Irish resources toward indigenous industry and in particular toward traded businesses. Any savings gained from paying less to foreign firms could be well used in indigenous industry development.

RESOURCE ALLOCATION

Statements on Irish industrial strategy have emphasized indigenous resource and manufacturing based industry. Government resources committed and actually spent do not reflect this goal. The funds approved for indigenous industry represent only about one third of the total, a proportion which has not increased over the decade. Actual funds paid to indigenous industry over the decade have increased only slightly in real terms despite the significant real increases in IDA budgets.

The subsidizing of non-traded businesses has taken place both under the re-equipment grant scheme and also the New Industry and Small Industry programs. It is suggested that subsidies to non-traded businesses have been too high a proportion of total IDA grants (Exhibit H).

A very high proportion of re-equipment grant payments were allocated to non-traded businesses which were not directly affected by the entry of new competitors. Companies in baking, bottling, animal feed, cement, concrete, wooden doors and plastics conversion compete mostly against other domestic firms. Other largely non-traded businesses such as newspapers, corrugated cartons and boxes, motor rewinds, plastic moulding, or van building have been recipients of many grants originally intended to help the country prepare for free trade. It is suggested that many of these resources could have been better used by businesses contributing to exports or those more directly affected by international competition.

Exhibit H
Allocation of IDA Grant Payments to Indigenous Companies 1970-79
(Constant 1980 £'s)

IDA Programme	Traded		Non-Traded		Total	
	£m	%	£m	%	£m	%
Re-equipment	61	44	76	56	137	100
New Industry	102	80	26	20	128	100
Small Industry (1)	19	49	20	51	39	100

(1) The Small Industry figures are for the period 1967-79

The New Industry and Small Industry programs combined have allocated 72 per cent of their grants to traded businesses and 28 per cent to non-traded businesses. Despite the goal of encouraging sub-supply spinoffs this kind of operation represented only 23 per cent of total payments versus 77 per cent for finished goods manufacturers. Less than half of these sub-supply projects were traded or compete directly with imports.

On occasion, IDA funding has not been discriminating enough, creating oversupply in some industries. This policy of encouraging employment creation in the short term without discriminating among businesses on a supply-demand basis has led to failures in a number of businesses such as structural steel, joinery, agricultural machinery, and metal containers.

THE METHOD USED TO DEVELOP INDIGENOUS INDUSTRY

Despite the dedicated efforts of the various Government agencies involved in developing indigenous industry, the record of jobs created and sustained is not encouraging. Slightly less than half the jobs approved in projects during 1972-78 have actually been created, either by new companies setting up during the 1973-79 period or by established companies expanding. When subsequent losses of jobs by closure or redundancies in these companies are taken into account, only 20% of job approvals were actually in place at the end of the period.

It has been argued that recent programs initiated by the IDA, SFADCo, CTT and other agencies will improve on this record. We have some reservations about these programs, which in our view will make them only marginally better than previous ones.

Structure Necessary for Competitive Success

There is insufficient concern about the structure necessary to make a company or industry competitively successful long-term. This encourages the establishment of firms which are too small to be viable and the mushrooming of staff assistance functions in many public agencies.

There is a renewed emphasis in most countries on helping small businesses. The potential contribution of small firms in larger or more industrialized countries is very different, however, from that of small firms in Ireland for two main reasons.

First, small firms in skilled sub-supply businesses in other countries tend to grow up around large established firms engaged in trade. This industrial infrastructure does not exist in Ireland and the network of sub-suppliers has to be created in a more planned and organized way. This requires a stronger corporate structure than is typically found in small independent firms.

Second, small firms in larger domestic markets can turn to export once they have built economies of scale and financial reserves at home. In Ireland they have to export earlier if they want to reach viability. This also requires financial and marketing expertise, not usually available in very small firms.

Most development and support agencies have increasingly concentrated their efforts on small firms. The concept of "hand-holding" during project evaluation, initiated by IDA's small industries division in 1967, was further extended to "after-care" by SFADCo in 1978.

The philosophy of intense "hand-holding" of small firms must be questioned. It is doubtful whether it is an effective long-term means for development of skills and exports. It has the effect of increasing small firms' dependence on outside services, instead of stimulating in-house long-term solutions or direct cross-company initiatives. It also has the effect of making the agencies more staff intensive.

Unless questions of necessary company size and appropriate industry structure are confronted directly on a business-by-business basis, high failure rates and an ever more expensive group of supporting agencies is likely to continue to develop.

Creation of Skilled and Traded Sub-Supply Industries

Though the Small Industry and Enterprise Development programs of the IDA have in part been concerned with linkage developments in Irish industry, it is the Project Identification Unit (PIU) which has had primary responsibility for this effort.

The PIU does not, however, have full operational responsibility and interactions with the New Industry division are not sufficiently systematic. Companies are visited to obtain their sub-supply requirements lists, but follow-up is erratic. Opportunities are identified but not group ensures that competitive sub-suppliers can grow over time and become successful.

Emphasis of Grants on Capital Investment

The evaluation of the structural problems of Irish indigenous industry has shown that many obstacles to development involve not production facilities but other areas of cost. For example, in the case of packaged food businesses the value added controlled by an individual processor is typically between 20 per cent and 30 per cent of total cost. Thus a cost disadvantage in the various inputs — raw materials, packaging materials, energy must be compensated for by a cost advantage 3 to 5 times larger in the value added, in percentage terms in order to achieve a competitive cost overall.

Ireland also lacks sufficient programs for export assistance and overseas marketing and distribution. The level of resources offered by Governments and used by companies in the major European countries in these areas is far greater than in Ireland, even taking into account the relative sizes of the export sector.

Private Sector Associations

Too high a proportion of initiatives for industrial development now come from State-sponsored bodies, and not enough come from industry. In other countries there are significant levels of industry-sponsored research. In areas such as training or management consulting, industry associations or industry-sponsored service organisations typically perform the tasks performed in Ireland by specialized state bodies.

It is not suggested that private associations are necessarily better or worse than government agencies for performing these various tasks. It is generally true, however, that government action taken along with private sector initiative makes for more effective policy.

Co-ordination between Resource and Manufacturing Agencies

In agricultural-based products and in timber, the policies followed by Irish industrial agencies are still not well co-ordinated.

Competing in agricultural commodities requires a low-cost position, and particularly a low-cost raw material source. The interaction between farming and processing influences processing costs downstream, and regularity of supply affects the overall marketing ability of the processor. The IDA has funded many projects to create greater processing efficiency, but the farm community has often not made the best use of this efficiency.

A similar problem exists in the forest industry where the IDA is undertaking significant investments at the processing level without adequate co-ordination with the policies of other agencies.

Development Policies and Foreign-Owned Firms

While there is continuing effort to encourage further investment and an upgrading of the skills functions and linkages provided by foreign firms, this effort lacks thoroughness. Greater success may only be possible through the active structuring of specific ventures, rather than the mere provision of incentives. Currently, the IDA and AnCO have undertaken a joint training venture with Lapple, but this is the only example of such an effort.

CONTROL OF THE INDUSTRIAL POLICY PROCESS

Job Approvals

Irish industrial policy aims to create jobs. As it is now designed, it expends too much energy creating job approvals. The two are not synonymous. Only 30 per cent of the jobs approved in foreign-owned firms between 1970 and 1978 were actually on the ground in 1981. The total of payments in the period 1973-80 was equal to 30 per cent of grants approved.*

An even greater discrepancy exists for indigenous industry. Sustainable jobs as a percentage of job approvals is only 14 per cent, while grant payments as a percentage of grant approvals has been 40 per cent. The discrepancies are due mainly to company failures and employment losses in surviving companies.

There are three dangers inherent in the gaps between approvals and reality:

- the difficulty of planning. Job and grant approvals must be discounted in order to be useful for planning purposes
- expectations are created in the population at large which are not met
- the anticipation of inflated numbers, as with the anticipation of inflated currency, causes in itself further inflation.

Though there is value in job approval targets, both politically to a government and motivationally to a development organization, it is felt that a more complete system for evaluating the performance of the development agencies should be adopted.

*The reasons for the differences between job approvals and jobs on the ground are given in Chapter 9 of the main report.

Tax Expenditures

The fastest-growing part of government assistance to industry is virtually uncontrolled by government agencies. Tax expenditures through tax-based leasing, Section 84 of the tax code, and preference share arrangements now represent about 17% of all incentives granted to industry, up from virtually nothing six years ago. These expenditures are now too large to remain unaudited.

Information Systems

It does not seem possible for the government to control intelligently the direction of its industrial policy if it cannot obtain sufficient data on tax expenditures or to track such factors as jobs in place, relative skill levels, sales and export performance of companies. There is currently inadequate information well enough processed to make strategic decisions.

Responsibility for Strategy

By law, government departments are responsible for determining strategy, and the various development agencies are responsible for implementing it. The current strategy for Irish industrial development is embodied in a plan formulated by the IDA within a general mandate of job creation. The government bodies who should be responsible for policy-making are often "fire-fighting" and responding to IDA initiatives. They have neither the staff nor the information to formulate strategy, or to oversee the development agencies on an ongoing basis.

RECOMMENDATIONS

NEW DIRECTIONS FOR IRISH INDUSTRIAL POLICY

The philosophy, approach, institutions and policies associated with Ireland's industrial development are fundamentally sound. The changes recommended below — in resource allocation, in programs for indigenous industry development and in the control of Irish industry policy are designed to improve an already excellent effort.

Budget Levels and Resource Allocation

The level of funds devoted to Irish industrial development should be as high as the Irish people can bear. To optimize the use of those invested resources, the following changes are recommended in the allocation of resources within Irish industrial policy.

- (1) *A substantial reduction of average grant levels for many foreign-owned firms locating in Ireland.*

In many cases considerably more incentive is given to foreign firms to invest in Ireland than is necessary. Ireland must respond more selectively by bidding very high on the really attractive projects, and significantly lower on the bulk of potential projects.

A strategy such as this requires clear guidelines to determine which projects merit particularly high grants, and which ones should receive little or no grant. Projects with the following characteristics (in descending order) should be valued highly:

- projects which will locate functions which are key to the competitive success of the company in Ireland;
- stand-alone projects which can survive without significant reliance on the parent company;
- projects which form a significant market for potential sub-supply linkages;
- projects with a real commitment to skilled employment;
- projects which can substitute for imports.

Continuing high grant levels for projects with the desirable characteristics described above, while cutting grants substantially for other projects, will yield employment results which are as good as is currently achieved, for less money. These budget cuts would allow better use of funds for indigenous industry development which will in the long run, create more defensible and higher income jobs.

- (2) *A sharp reduction of grants given to indigenous companies for non-traded businesses (with the exception of high-skilled sub-supply industries).*

When Irish value added is not threatened by imports, grants should not be necessary to create business opportunities. The only justification for granting non-traded businesses is in cases of particularly acute regional disparities within Ireland.

The distinction between traded and non-traded businesses is one of degree which varies country by country and over time. The burden of proof that a business is traded should fall on the company applying for a grant. The IDA should develop a simple framework (market share, origin of competitors, cost structure with relative importance of scale and logistics) to evaluate the contentions put forward by companies.

In addition to being unnecessary, grants to non-traded businesses can create a "businessmen's dole" mentality. All companies may come to expect a grant for any investments. The lack of a grant may even become a stigma indicating that a company or project is not worthy.

- (3) *A substantial increase in funds devoted to the development of indigenous export businesses.*

Creating and sustaining jobs in indigenous firms is far more difficult and expensive than doing so in foreign-owned firms. Despite this, it is questionable whether the Irish economy can achieve the income goals to which it aspires with a traded industry structure based primarily on foreign-owned companies. Key business functions will continue to be located close to home or in major markets.

A goal of raising the proportion of funds allocated to indigenous export or skilled sub-supply firms from less than 40 per cent over the past 10 years to 50 per cent by 1985 and 75 per cent by 1990, should be made explicit.

A much higher proportion of funds should be used to encourage large firms to reinforce their export positions, expand in new markets or start new businesses with trade potential.

The Development of Indigenous Industry

Perhaps the greatest need for Ireland's industrial policy in the 1980's is to better manage the development of indigenous industry, both manufacturing and raw material based. The following recommendations address this issue.

- (4) *The development effort aimed toward new indigenous industry must be reorganized to emphasize the building of structurally strong Irish companies rather than strong agencies to assist weak companies.*

The encouragement of small company promotion and provision of elaborate "hand-holding" by IDA, SFADCo, CTT, IIRS, IPC, NBST, Innovation Centers, etc. will not, it is suggested, succeed in creating new, strong, exporting and skilled sub-supplies companies.

A more structural approach is necessary, focussing on building competence within companies and making sure they can meet all competitive challenges. This type of effort would be a "hands on" approach, which stresses the building of fewer larger companies with strong internal capability. It implies fewer company creations and a greater selectivity of businesses which receive backing. This is not proposed as a substitute for the development of small industries and the encouragement of new entrepreneurs, but rather as a supplement in those cases where the business opportunity is large and chances for success are great.

Small firm projects need not be handled by a specific agency. The building of structurally strong firms and the need to foster linkages with foreign firms argues for the IDA to keep small industry development as part of an integrated indigenous development charter.

- (5) *The Government should encourage greater participation by large indigenous companies and by the indigenous financial community in traded and skilled sub-supply businesses in Ireland.*

Ireland's indigenous industry will not develop at a fast enough pace without greater involvement of large companies in traded or skilled sub-supply industries. Many of these companies have received grants to invest in local non-traded businesses. Their risk-return relationships currently dictate investment abroad or in additional local non-traded businesses. The Irish government's industrial policy must alter these relationships in order to encourage other investments which conform more to national needs.

It is not suggested that government dictate investment decisions in large Irish companies. There should be a more active dialogue between government policymakers and large companies about investment plans, and mechanisms for the government to fiscally favour certain types of investment over others.

- (6) *The grants available for indigenous industry should address specific cost penalties and should be directed to the long-term resolution of these penalties.*

The capital grant is overused in Ireland. The fact that the only way to reduce the cost of capital and therefore increase return on net assets in Ireland is to invest in fixed tangible assets, distorts the allocation of resources towards capital intensive businesses and away from knowledge intensive businesses.

For many companies, the large share of investment is not in equipment and plant but in areas normally reported as expenses on income statements such as product or process technology, overseas marketing, skill development, application engineering, etc. Similarly, many cost penalties from which Irish companies suffer are related to investments which need to be made in infrastructure. An additional set of potential grants should be introduced which will more specifically address these investments and cost disadvantages in areas such as logistics, R & D, linkages, overseas marketing and skill development.

These grants should be administered by existing agencies according to their area of competence: CTT for overseas marketing, IIRS for testing, AnCO for training, IDA for tooling and prototypes, and the NBST for general R & D, technology licenses, and new product user grants. Among these efforts, those directed at marketing (CTT) and R & D (NBST and IIRS) are the ones which need the greatest increments in grant budget.

- (7) *Consideration should be given to further use of loan, loan guarantee, redeemable equity and participative loans, for providing incentives to foreign firms.*

Ireland is relatively unique among countries in not having developed these mechanisms (beyond tax-based lending) as part of its incentive package. A fresh look should be taken at using these measures in lieu of capital grants in certain instances.

Loan guarantees would have the advantage of reducing cash outlays for the State and inducing banks to cooperate in financing industrial development

- (8) *In order to spur indigenous industry development better advantage should be sought from foreign companies operating in Ireland.*

Currently, the IDA relies on foreign companies to produce projects to "deepen" their investments in Ireland. A more productive model exists in the Lapple training project. In other countries foreign companies receive extensive incentives to participate in jointly sponsored projects which help develop indigenous skills and businesses.

The IDA should, either by itself or through private or public companies in Ireland, try to structure such ventures more directly. A separate section within IDA to coordinate and fund such developmental efforts including linkages with foreign firms should be considered.

- (9) *New joint efforts should be undertaken to oversee the development of Ireland's resource-based industries.*

Large sums have been mis-spent on processing facilities for agricultural goods because proper coordination with primary producers did not take place. Because the study did not address the natural resource area directly, the form such a coordinated effort should take is not proposed here, but it is certain that a great opportunity will continue to be lost if nothing is done.

- (10) *Ireland's industry associations should play a more direct role in assisting the development of their industries.*

In areas of product and process design, and in various aspects of overseas advertising, marketing and distribution, industry associations in other countries often play a crucial role. It is suggested that the Confederation of Irish Industry could effectively expand its range of activities. The principal areas where this might be accomplished are in coordinating technical centers in Ireland and marketing efforts in selected foreign countries.

The Control of Irish Industrial Policy

Ireland's industrial policy is implemented by a group of strong, capably staffed agencies. There are a few areas where overall control of the process can be improved, however. These related to information systems and goal measurement and to the control of tax expenditures.

- (11) *Better means are necessary to measure the progress of Ireland's industrial policy.*

The job measure is overemphasized with harmful results. Ireland needs sustainable jobs with high incomes, not job approvals.

There is a need to develop a series of reports which measure the success of Irish industrial policy in clearer terms than exists today. These reports should clearly show job gains and losses and which correlate with job and grant approvals, employment levels, value added per employee, local purchases exports imports, grant payments, and other incentives.

- (12) *Government should gain better control of tax-based leasing and Section 84 disbursements.*

As long as the tax advantage provided to the banks through these funding methods are in fact passed onto industry, we believe that these are useful funding mechanisms for industrial development.

The Department of Industry in cooperation with the Department of Finance should have the ability to set guidelines for the use of these funds for certain types of projects. The information as to the recipients of the funds should be made available to the Government for policy making purposes.

(13) *The Government departments should reassume a more active policy role.*

Better policy oversight is necessary so that responsible government departments can more forcefully set policy direction. Implementing boards should play a role in setting and evaluating the policies which govern their activities, but a competent higher authority should have the primary role.

It is recommended that to accomplish the dual goals of keeping the boards flexible and non-bureaucratic, and yet providing appropriate oversight, there should be active post-reviews. The development of appropriate data, such as referred to in recommendation (11), will be necessary for this to be successful.

NOTE: The date on the front cover of the report refers to the date the report was submitted to the Government. The dates listed here are the dates of publication.

Title	Date	
1. Report on the Economy in 1973 and the Prospects for 1974	April	1974
2. Comments on Capital Taxation Proposals	July	1974
3. The Economy in 1974 and Outlook for 1975	Nov.	1974
4. Regional Policy in Ireland: A Review	Jan.	1975
5. Population and Employment Projections: 1971-86	Feb.	1975
6. Comments on the OECD Report on Manpower Policy in Ireland	July	1975
7. Jobs and Living Standards: Projections and Implications	June	1975
8. An Approach to Social Policy	June	1975
9. Report on Inflation	June	1975
10. Causes and Effects of Inflation in Ireland	Oct.	1975
11. Income Distribution: A Preliminary Report	Sept.	1975
12. Educational Expenditure in Ireland	Jan.	1976
13. Economy in 1975 and Prospects for 1976	Oct.	1975
14. Population Projections 1971-86: The Implications for Social Planning — Dwelling Needs	Feb.	1976
15. The Taxation of Farming Profits	Feb.	1976
16. Some Aspects of Finance for Owner-Occupied Housing	June	1976
17. Statistics for Social Policy	Sept.	1976
18. Population Projections 1971-86: The Implications for Education	July	1976
19. Rural Areas: Social Planning Problems	July	1976
20. The Future of Public Expenditures in Ireland	July	1976
21. Report on Public Expenditure	July	1976
22. Institutional Arrangements for Regional Economic Development	July	1976
23. Report on Housing Subsidies	Feb.	1977
24. A Comparative Study of Output, Value Added and Growth in Irish and Dutch Agriculture	Dec.	1976
25. Towards a Social Report	Mar.	1977
26. Prelude to Planning	Oct.	1976
27. New Farm Operators, 1971 to 1975	April	1977
28. Service-type Employment and Regional Development	July	1977
29. Some Major Issues in Health Policy	July	1977
30. Personal Incomes by County in 1973	July	1977
31. The Potential for Growth in Irish Tax Revenues	Sept.	1977

32. The Work of the NESc: 1974-1976	Sept.	1977
33. Comments on Economic and Social Development, 1976-1980	July	1977
34. Alternative Growth Rates in Irish Agriculture	Cct.	1977
35. Population and Employment Projections 1986: A Reassessment	Oct.	1977
36. Universality and Selectivity: Strategies in Social Policy	Jan.	1978
37. Integrated Approaches to Personal Income Taxes and Transfers	Mar.	1978
38. Universality and Selectivity: Social Services in Ireland	June	1978
39. The Work of the NESc: 1977	June	1978
40. Policies to Accelerate Agricultural Development	Sept.	1978
41. Rural Areas: Change and Development	Sept.	1978
42. Report on Policies for Agricultural and Rural Development	Sept.	1978
43. Productivity and Management	Feb.	1979
44. Comments on Development for Full Employment	Dec.	1978
45. Urbanisation and Regional Development in Ireland	June	1979
46. Irish Forestry Policy	Sept.	1979
47. Alternative Strategies for Family Income Support	April	1980
48. Transport Policy	Mar.	1980
49. Enterprise in the Public Sector	May	1980
50. Major Issues in Planning Services for Mentally and Physically Handicapped Persons	Oct.	1980
51. Personal Incomes by Region in 1977	July	1980
52. Tourism Policy	Dec.	1980
53. Economic and Social Policy 1980-83: Aims and Recommendations	Nov.	1980
54. The Future of the National Economic and Social Council	Feb.	1981
55. Urbanisation: Problems of Growth and Decay in Dublin	Sept.	1981
56. Industrial Policy and Development: A Survey of Literature from the Early 1960s to the Present	Feb.	1981
57. Industrial Employment and the Regions 1960-82	May	1981
58. The Socio-Economic Position of Ireland within the European Economic Community	Sept.	1981
59. The Importance of Infrastructure to Industrial Development in Ireland — Roads, Telecommunications and Water Supply	Nov.	1981
60. Minerals Policy	Oct.	1981
61. Irish Social Policies: Priorities for Future Development	Nov.	1981
62. Economic and Social Policy 1981 — Aims and Recommendations	Oct.	1981
63. Population and Labour Force Projections by County and Region 1979-1991		
64. A Review of Industrial Policy		

ISBN 0-907116132