<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>Industrialisation strategies : lessons from the Irish experience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Authors(s)</strong></td>
<td>Barry, Frank</td>
</tr>
<tr>
<td><strong>Publication date</strong></td>
<td>1990</td>
</tr>
<tr>
<td><strong>Conference details</strong></td>
<td>Paper presented at the University of Birmingham's School of Public Policy, November 1989</td>
</tr>
<tr>
<td><strong>Series</strong></td>
<td>UCD Centre for Economic Research Policy Paper Series; PP90/1</td>
</tr>
<tr>
<td><strong>Publisher</strong></td>
<td>University College Dublin. School of Economics</td>
</tr>
<tr>
<td><strong>Item record/more information</strong></td>
<td><a href="http://hdl.handle.net/10197/1382">http://hdl.handle.net/10197/1382</a></td>
</tr>
</tbody>
</table>
Industrialisation Strategies: Lessons from the Irish Experience

Frank Barry *
Dept. of Political Economy
University College Dublin

1. Introduction

Three phases, corresponding to prevailing economic strategies, can be identified in the experience of the Republic of Ireland since independence. The almost completely laissez-faire policy followed in the 1920's was replaced in the early 1930's by a strongly-protectionist regime which lasted for the next three decades. Since the early 1960's, however, the country has served as one of the longest-running examples of the type of outward-oriented strategies recommended for less developed countries by international institutions such as the World Bank and the International Monetary Fund.

Even if only for these reasons, an analysis of the Irish industrial experience under the various policy regimes may throw up useful lessons for LDC's contemplating strategies to stimulate industrialisation. The Irish experience may be judged to be of even greater relevance, however, when structural parallels between the Irish and LDC economies are taken into account.

* Paper presented at the University of Birmingham's School of Public Policy, November 1989, and at several seminars in the Republic of Zambia, May 1990. Helpful comments from the seminar participants are gratefully acknowledged.
Like individual countries within the latter group, Ireland is a peripheral and relatively insignificant actor on world markets. By Western European standards it is still highly agricultural, with this sector accounting for more than 15% of total employment in the 1980's. Most importantly, though, it shares with LDC's a dual industrial structure, with indigenous industry for the most part small in scale and labour-intensive, geared either towards the home market or else engaged in low value-added processing of primary commodities for export. At the same time, under its outward oriented policies it has succeeded in capturing a relatively large share of the world supply of foreign direct investment; the multinational sector is of course more capital intensive and employs more highly-skilled labour. Notwithstanding the fact that Ireland has been regarded internationally as a successful example of the application of the outward-oriented strategy, the dual nature of the Irish economy is very marked, and Ireland might usefully be thought of as a very high-income developing country rather than as a low-income industrialised economy.

The aim of the paper, then, is to analyse the performance of the Irish industrial sector under the various policy strategies adopted, focussing in particular on the outward-oriented phase, in order to see what insights can be gained into the issues facing developing countries grappling with the problem of instituting practicable industrial policies. The next section places Ireland's current strategy in historical context. Section 3 of the paper presents a discussion of recent thinking in
Ireland on the way forward for macro-industrial policy, and the paper concludes with a summary of some lessons that may be drawn from the Irish experience.

2) Ireland's Outward-Oriented in Historical Context

Irish economic policy since independence can be divided into three stages:


b) Protectionism: 1932-late 1950's.

c) An interventionist outward-oriented strategy: late 1950’s to the present.

a) The Free-Market Era

Free trade had prevailed between Britain and Ireland for 100 years by the time independence was achieved in 1922. Over the course of the 19th century, Irish industry (which consisted predominantly of textile-production) had declined dramatically, being unable to compete, according to O'Malley (1989), with British industries which had mechanised earlier and achieved substantial economies of scale. (Only in the North-East of the country, present-day Northern Ireland, had early and large-scale mechanisation allowed the linen and shipbuilding industries survive and prosper.) The increased international competition did not lead to the cultivation of market niches within the Irish industry, as the modern theory of international trade might lead us to expect; this was the competitive strategy that allowed the French textile industry of the time to survive and prosper [see Pollard (1985)]. (The failure or inability of Irish industry to
adjust to international competition in this way will show up again when we come to discuss the experience of indigenous industry in recent decades.)

The country at independence was therefore specialised as an agricultural producer, and the government of the time took the view, based on a static notion of comparative advantage, that since the prosperity of agriculture depended on free-trade and ease of access to the important British market, then that policy should be maintained.

In fact, the first two years of independence were marred by civil war, and this whole first stage of recent Irish history should really be seen as one in which the difficulties of the establishment of a stable political state took precedence over the development of economic policy.

The non-interventionist free-trade strategy did little to foster industrialisation: with less than 5% of the labour force engaged in manufacturing in 1926, [compared to more than 50% in agriculture], employment grew only very slowly (at an annual average rate of 1.6% for 1926-1931), as seen in Table 1, and productivity grew not at all.
Table 1

% Growth per annum (volume), Manufacturing Sector

<table>
<thead>
<tr>
<th></th>
<th>Employment</th>
<th>Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laissez-faire</td>
<td>1.6</td>
<td>0</td>
</tr>
<tr>
<td>1926-1931</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protectionism</td>
<td>3.1</td>
<td>1.1</td>
</tr>
<tr>
<td>1932-1960</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950-1960</td>
<td>0.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Outward-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1961-1973</td>
<td>2.3</td>
<td>4.0</td>
</tr>
<tr>
<td>1974-1979</td>
<td>0.8</td>
<td>4.3</td>
</tr>
<tr>
<td>1980-1988</td>
<td>-2.1</td>
<td>8.9</td>
</tr>
</tbody>
</table>


b) The Protectionist Phase

A more radical wing of the nationalist movement achieved power in 1932 and instituted protectionist policies in an attempt to stimulate domestic industrialisation and self-sufficiency. Although national-income growth appears to have been respectable under the earlier free-market policies (Kennedy 1971), a new manufacturing sector was brought into being under the shelter of protectionism, since tariff-barriers against imports raised the potential profitability of local manufacturing. Employment growth in this sector averaged 3.1% p.a. over the period up to 1960 (compared to 1.6% earlier) and productivity grew at an average of 1.1% p.a. (compared to the earlier figure of zero). The industries that arose under protectionism were not export oriented, as one would of course expect, since the domestic market was too small to allow the attainment of scale economies.
sufficient to guarantee the international maturity of the "infant industries": the manufacturing sector under protectionism consisted of new domestically-oriented Irish firms, and subsidiaries of British companies that located in the country in order to service the sheltered local market.

This industrial strategy ultimately encountered all the problems that bedevil import-substituting protectionist strategies in small economies. Being cut off to a large extent from the international market, Irish industry benefitted little from post-war European growth. Instead, the need to import capital equipment and raw materials, alongside the failure to break into export markets, gave rise to recurring balance of payments problems which induced contractionary aggregate demand policies on the part of government, resulting in severe recession in the 1950's. The depth of this recession induced the next major change in Irish industrial policy.

c) The State-Supported Outward-Oriented Strategy
The limitations of the protectionist strategy which became obvious in the 1950's stimulated a dramatic change in industrial policy from the late 1950's onwards. The four main elements of this new policy, which remains in place to this day, were as follows:

- capital grants were allocated to encourage multinational companies to set up operations in Ireland, and to induce indigenous firms to expand or start up activities. Data for the
early 1980's shows that almost 80% of direct aid went towards physical capital formation in machinery and factory construction (NESC, 1986, p.267.), while the capital grants awarded worked out at an average of around £8,000 sterling per job in grant-aided industry. (NESC 1982)

- tax-incentives were also given to companies, primarily to stimulate export-oriented production. The Export Profits Tax Relief (EPTR) scheme allowed 100% tax remission on profits earned from increases in export sales over the levels achieved in the mid-1950's. (so it applied to all exports of firms starting up since that date). Under pressure from the European Community this discrimination in favour of exports had to be removed in 1978, however, but it was replaced by a new low rate of corporation tax, of 10%, for all manufacturing.

- a commitment to free trade was made. Tariff barriers were reduced progressively in the early 1960's, and in 1965 the Anglo-Irish Free Trade Area agreement was signed. This was followed by the accession of Ireland and Britain to the EEC in 1973.

- state agencies were established to promote exports and multinational investment. These included An Coras Trachtala (the Irish Export Board), a promotional and advisory body, and The Industrial Development Authority (IDA), which has become the major grant-allocation and industrial-promotion agency.

c(i) The Experience of the 1960's and 1970's
In the 1960's and 1970's this new outward-oriented strategy (which has been termed "state-supported" to differentiate it from the "laissez faire" free-market strategy of the 1920's) appeared
to operate with remarkable success:

- The growth rate of manufacturing output jumped from an average of 1.7% over the 1950's (1951-58) to 6.7% in the period 1958-73 and averaged 5.1% even in the troubled remainder of the 1970's.

- The growth rate of manufacturing employment followed a similar pattern, rising from 0.2% to 2.4% (periods as above), and averaging 0.8% in the 1970's.

- By the end of this period the sectoral distribution of the labour force began to look somewhat more like the norm for Western Europe, with agriculture accounting for 19% in 1979, compared to 37% in 1960, while industry (manufacturing, construction, electricity, gas, mining) rose from 23% to 32% over the period.

- As a consequence of its outward-looking policies and the widely-recognised efficiency of the state agency, the IDA, Ireland succeeded in capturing a disproportionately high share of the world supply of foreign direct investment, such that "only nine of the developing countries exceeded Ireland's share of US TNC's employment...With the exception of Singapore, all these countries have much larger populations than Ireland"; [O'Malley, 1989,p.156.] "In addition, non-US foreign companies together account for more manufacturing employment in Ireland than US firms" [O'Malley, 1985, p. 143]). By the late 1970's foreign industry accounted for over one-third of manufacturing sector employment and as much as 70% of manufactured exports.

- The foreign exchange constraint on domestic aggregate demand policies had been relaxed by the export-orientation of the
multinationals which located operations in Ireland, so that demand remained relatively buoyant for the output of the sheltered (non-internationally-trading) sectors of the economy.

- As a depiction of the apparent success of Irish industrial strategy in this period, we can note that the Irish rate of growth of GNP was only 70% of Britain's in the decade 1950-1960, but this ratio rose to 140% for the periods 1960-73 and 1973-85.

\[c(ii) \text{ The Experience of the 1980's}\]

The Irish economy has been in prolonged recession over the course of the 1980's, with an unemployment rate among the highest in the industrialised world. Just as the recession of the 1950's forced a major change in industrial strategy, so the economy's poor performance over the last decade has directed attention to some disturbing trends in the underlying industrial structure which are masked by the type of aggregate indicators quoted above. These in turn have stimulated proposals for changes in certain aspects of Irish industrial policy.

The problems which have become apparent during the 1980's can usefully be grouped into those pertaining to the ability of the economy to attract multinational investment, and those inhibiting the development of indigenous industry:

- **Foreign Industry**

Ireland has proved in recent decades to be an exceptionally attractive site for multinational investment for several reasons - because it has offered access to the EEC, because its low rate
of corporate profits tax has allowed multinational companies to engage in transfer pricing, and because its history of political stability combined with low wage rates (by Western European standards) and an English-speaking environment has proved of particular importance to foreign companies with little experience of offshore operations.

Ireland's relative attractiveness would appear likely to decline, however, with the accession of the other low-wage economies of Greece, Spain and Portugal to the EEC. Britain's high unemployment has also caused it to compete more strongly for footloose foreign direct investment, while the perceived political stability of the "Newly Industrialising" and some of the "Newly Exporting Countries" has grown internationally. Recent developments in Eastern Europe will accentuate this trend.

At the same time, labour-saving technological progress has continued unabated in multinational industry, and the factor proportions adopted by local subsidiaries tend to be relatively invariant to local factor prices; see e.g. ILO (1984), pp. 27-8.

Occurring alongside these changes in the international environment, and consistent with the explanations offered, there has been a 7% fall in the numbers employed in foreign industry in Ireland between 1980 and 1989.
- Indigenous Industry

The fall in the numbers employed in indigenous manufacturing has been an even more dramatic 26% (from a base over one and a half times larger than the numbers employed in foreign industry). While this was partly due to highly contractionary fiscal policies necessitated by a debt crisis in Ireland that mirrored the international crisis, this very fact emphasises the dependence of indigenous industry on the size of the home market and draws attention to its failure to break into international markets.

Since the opening up of free trade in the mid-1960's, indigenous industry has lost market share in Ireland (1.2% p.a. increase in competing imports' share of Irish market, 1967-79), has gained little or no market share abroad, and has been increasingly squeezed into the sheltered (non-traded) sectors of economic activity [see O'Malley (1989), esp. chpt. 6].

The differential impact of free trade on the indigenous and multinational sectors of the economy has been shown most starkly in an important recent report by the National Economic and Social Council (1989). Data on the share of intra-industry trade (reflecting adjustments within industrial sectors) in total trade suggests that the adjustment to free trade was relatively smooth in the 1960's and 1970's, with indigenous firms narrowing the range of products they produced and using their relatively stable domestic base as a springboard for gradual development of export markets. At the same time the flow of multinational investment
induced by outward orientation raised total exports dramatically. The picture for the 1980's is very different. The share of intra-industry trade fell, reflecting much greater inter-sectoral adjustment, which is bound to bring with it greater employment disruption. What seems to have happened is that the collapse of domestic demand wiped out the base that indigenous industry relied upon to build up the economies of scale necessary to penetrate export markets, and so these firms have either disappeared or been squeezed into the most sheltered corners of the domestic market. This hypothesis is consistent with the NESC report's revelation that the average size of establishments in indigenous industry has declined since the opening up of free trade.

3) Current Thinking on Macro-Industrial Strategy
On a macroeconomic level, then, the employment-creation task facing the economy is either to compete even more strongly to induce a greater flow of multinational investment into the economy, or to concentrate more on assisting indigenous industry in breaking into international markets.

In practise, there appears to have been some acceptance of the fact that there is a high degree of exogeneity in the inflows of foreign direct investment, and scarce state resources have begun to be diverted more and more towards the development of internationally competitive indigenous industries. These would be expected to have stronger backward and forward linkages with
the rest of the economy, (many multinational factories have functioned essentially as assembly plants using materials imported from their parent companies abroad), and there is a greater likelihood of their locating their research and development units in Ireland. This in turn could be expected to generate higher incomes and greater spinoffs, and indigenous companies locked into the economy in this way would be less likely to relocate elsewhere in response to changes in the international economic environment.

While domestic cost competitiveness is a necessary condition for the development of indigenous industry (and indeed for the ability of the economy to attract multinational investment) it is by no means clear that it is sufficient; this is the argument of those who hold that firms newly entering international markets need to overcome substantial "entry barriers" before they can compete on an equal footing against established firms. The most important such barriers would be:

- economies of scale in production
- well-developed marketing and distribution systems
- advanced technology
- highly skilled and experienced workforces
- production with a high capital requirement.

These factors would imply that a new company attempting to set up in an industry characterised by such barriers might have to make losses for a substantial number of years before a viable scale of production could be achieved. Clearly there will be few
entrepreneurs with sufficient resources, and with the willingness to commit them, to compete in this environment. It may be for this reason that we find Irish indigenous industry concentrated in the small-scale sheltered sectors or in the low-value-added processing of primary products for export.

State action to upgrade indigenous industry is therefore moving (slowly), in the wake of the NESC Report on Industrial Policy (1982) and the Government White Paper (1984) which followed, to tackle these specific entry barriers. Policies adopted by the government and/or the Industrial Development Authority to this end include:

- the setting-up of a National Development Corporation in the mid-1980's to finance and support, with the expectation of a future payback to the state, projects which would have to suffer initial losses before a commercially-viable scale could be achieved.

- the instituting by the IDA of a Company Development Programme to encourage strategic planning, in terms of the development of new market or product areas for example, amongst selected Irish firms.

- the IDA National Linkage Programme which aims to develop selected firms as sub-suppliers to the multinational companies; initially to those located in Ireland, but foreign markets are also targeted for the future.

- a movement away from grants for fixed assets to grants for non-fixed-asset investment in areas such as research, technology acquisition, and management development.
the replacement of investment subsidies by employment grants, at least for small firms.

Several other proposals along similar lines - such as the development of Japanese-style large general trading companies, and "corporate shells" to undertake specific projects by assembling a consortium of interests with the requisite capital and managerial skills - remain on the discussion table.

The overall thrust of these policy changes, as described by McHugh (1989) involves:

1. increased selectivity in the allocation of state aid to companies in order to raise selected companies, or groups of companies in partnership, above the size threshold necessary to break into international markets for certain products.

2. a focus on "sales capability rather than production capacity", which includes encouraging companies to engage in marketing partnerships.

3. a movement from "a project- to a programme-orientated system" of aid to encourage companies to develop strategic plans to expand into niche areas of international markets.

4) Conclusions: Lessons to be drawn from the Irish experience

i) On the choice between indigenous and multinational industry:

There are advantages associated with both types of industries, so the question is hardly of the either/or type. Export-oriented
multinational investment is easier to stimulate than export-oriented indigenous industry in a free-trade environment, and so will have a more immediate effect on the balance-of-payments constraint. However, export-oriented indigenous industry offers greater advantages to the economy for a number of reasons: since many multinational operations in LDC's (other than those engaged in the processing of primary products) involve little more than the assembly of inputs purchased from the parent company, indigenous industry will generally involve greater backward and forward linkages with other sectors of the economy.

Multinationals also cannot be expected to locate their Research and Development activities away from the source country, so that the only hope for the development of R&D in LDC's (along with the higher wages, greater skills, and greater potential for spinoffs associated with these activities) is if indigenous firms can be induced or aided to surmount the entry-barriers blocking access to international markets for many manufactured goods.

Indigenous firms will also be less footloose, and therefore more open to the influence of the local government. Although they have not been of any significance in the Irish experience, one could imagine two factors that might make multinational investment less desirable than it would otherwise be for some other sink economies. One of these is that influence could run strongly in the opposite direction when resource-based multinationals confront LDC governments, and the other arises when multinational subsidiaries compete with indigenous industry for scarce funds on local capital markets; Ireland has been spared this problem
because its financial markets are so closely integrated with those of other EC countries.

ii) Policies to attract multinationals:
In the Irish case it is generally agreed that the low tax rate on corporate profits (and previously the export profits tax relief) has been more important in this respect than the capital grants offered by the IDA. The extent to which such incentives are necessary depends on the countries or regions against which one is competing in the attempt to attract multinationals.

Import-substituting multinational activity can be induced by protectionism if the economy is large; export-oriented activity (which offers greater benefits) if the country is operating in a free-trade environment.

If government spending is large in absolute terms, (as would be the case in many Western European economies) then restrictive government procurement policies function like protectionism as a way of influencing multinational location decisions.

Finally, there is the important issue of agglomeration economies, whereby there are beneficial spillover effects for companies if other companies engaged in related activities are also located in the area. This applies to the exchange and joint development of technical information; the likelihood that large-scale sub-suppliers will be available locally; the economies of scale in the provision of the necessary infrastructure, including roads,
postal services, and telecommunications; and the availability locally of a skilled and educated workforce. These factors sharply limit the extent to which the objectives of regional policy (e.g. a wide spatial distribution of industrial activity) can be consistent with the requirements of productive efficiency.

As barriers to international trade and factor mobility fall over time (e.g. 1992 in Europe), the concentration of particular industries in particular regions is likely to increase. The regions most likely to prevail may well be those with the highest concentrations at the beginning of this process.

iii) Policies towards indigenous industry

The point made above about agglomeration economies applies in this case also. (The Buchanan Report recommended for this reason that industrial development should be restricted to thirteen of the larger towns and cities in Ireland, but this policy has not been followed, presumably due to political pressures.)

Throughout this paper the emphasis has been on export-oriented indigenous industry, because multinationals, while they relieve the foreign-exchange constraint, cannot be expected to upgrade the industrial structure of an LDC from "low-wage" into "complex factor cost" businesses. There remains then the problem of aiding indigenous industries to break out of sectors where success is dependent on the maintenance of low wages (although these may provide a useful starting point on the path to industrialisation). The policies discussed in the previous
section of the paper are of most relevance here. They involve promoting the growth of firms to the size required for them to be able to compete on world markets; this can occur through the amalgamation of small firms, or through granting aid only to the most efficient firms in a sector (on condition that they orient themselves towards the export market; aid should be conditional on their achieving targets agreed upon in advance with the state agency).

In some sectors large scale will be less important than in others. These are the sectors in which it is possible to find and supply to a specialised market niche. In other industries, ones which are fairly highly concentrated, large scale is clearly required if international competitiveness is to be achieved, and there is no point in aiding many different firms in these areas; if state aid is going to be granted, it should be granted only to one firm, or to an amalgam or consortium.

Finally, since most LDC's are specialised to some extent in the production of primary products, it seems natural to assume that there may be some element of dynamic comparative advantage to be gained by aiding the move upwards into the development of brand names, which increases the income-elasticity of demand for these products, and offers higher rates of value-added.
References


